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Tidal Current Variability on the Scotian Shelf and Slope

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ABSTRACT

Gregory D.N. 1988. Tidal Current Variability on the Scotian Shelf and Slope. Can. Tech. Rep. Hydrogr. Ocean Sci. No. 109: iv + 38 pp.

This report presents a statistical summary of tidal current variability on the the Scotian Shelf based on moored current data and simulated data generated by a barotropic tidal circulation model of the Scotian Shelf. Included in the observational data set are six hundred and seventy two separate deployments representing over two thousand data months of observations

Tidal constituents used in the variability computations for both the observational and modelled data are M2, S2, N2, K1, and O1.

RÉSUMÉ

Gregory D.N. 1988. Tidal Current Variability on the Scotian Shelf and Slope. Can. Tech. Rep. Hydrogr. Ocean Sci. No. 109: iv + 38 pp.

Ce rapport présente un résumé statistique de la variabilité des courants de marée sur le plateau Scotian d'après des données de courantomètres amarrés et des données simulées produites à l'aide du modèle barotrope de la circulation tidale sur le plateau Scotian. Les données d'observation comprennent les résultats obtenus lors de six cent soixante-douze installations distinctes, constituant plus de deux mille mois-données d'observations.

Les composantes de la marée utilisées pour les calculs de la variabilité, tant pour les données d'observation que pour les données de simulation, sont M2, S2, N2, K1 et O1.

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Introduction

This report, a companion to Gregory and Smith (1988), Current Statistics of the Scotian Shelf And Slope, presents a statistical summary of the variability of the tidal current on the Scotian Shelf and Slope. The statistics are produced independently from both the observational (moored current meter) data and the results from a barotropic tidal circulation model of the Scotian Shelf.

Current Meter Data Base

The initial data base for the analysis consisted of all of the current meter data on the Scotian Shelf that had a record length of at least fifteen days duration (see station location map page 4). The coverage area includes the Scotian Shelf and the Gulf of Maine south of Yarmouth and east of the Fundian Channel. Because of its influence on the shelf, the Laurentian Channel to Cabot Strait was also included. All deployments in sheltered embayments and the very nearshore were excluded, as were all of the deployments in the Bay of Fundy and most of the Gulf of Maine. Any data which were commented questioning data quality were also excluded from the data base. The resulting data set consisted of six hundred and seventy two separate time series spanning the period from 1966 to 1986.

Because of the nature of our research, the data tend to be concentrated in specific areas with very little coverage elsewhere. The majority of our data are concentrated in five areas which reflect the venues for particular experiments. Specifically these are: the 1975-78 Shelf Break experiment in the vicinity of 43N 63W (Lively 1979); the 1980-83 Cape Sable experiment (Lively 1984), and the 1983-85 Browns Bank experiment (Lively 1988) both off southwest Nova Scotia; the winter 1986 Canadian Atlantic Storms Project (CASP) in the nearshore region east of Halifax (Lively 1988); and the wellhead drilling operations around Sable Island from 1980 to 1986.

All of the selected time series were initially filtered with a simple running mean filter and sub-sampled at hourly intervals. The number of filter weights selected was dependent upon the initial sampling interval which is typically 10 - 30 minutes, but could be as short as two minutes. The hourly data were then analyzed for the tidal constituents M2, S2, N2, K1, and O1.

Numerical Model

The numerical model used to simulate the tidal circulation on the Scotian Shelf is described in de Margerie (1985) and de Margerie and Lank (1986). The model solves the fully non-linear equations of motion in spherical co-ordinates using a semi-implicit method similar to that of Greenberg (1983). The model resolution is a 4' x 4' (approximately 7 by 5 kilometers) and extends beyond the 200 meter isobath.

In de Margerie and Lank (1986), the authors demonstrate that in order to reduce the computational requirements, it is sufficient to simulate only the constituents M2, K1, and O1 since the semidiurnal

constituents S2 and N2 could be adequately inferred from M2. By comparison with current measurements of Petrie (1982), they concluded that approximately 94 % of the tidal current variance could be accounted for by M2, K1, and O1 with inference of N2 and S2. The inference relationships calculated by de Margerie and Lank (1986) and used in this analysis were:

$$N2 = .201\ M2 - 21.8 \text{ deg.}$$
$$S2 = .223\ M2 + 32.0 \text{ deg.}$$

The cotidal charts (Appendix A) and tidal ellipses (Appendix B) for M2, K1, and O1 are reproduced as they appeared in de Margerie and Lank (1986).

Statistical Analysis and Data Presentation

For both the observational data and the numerical model, the three semi-diurnal (M2, S2, N2) and two diurnal (K1, O1) constituents were used to compute the amplitude and orientation of the maximum and minimum variance of the tidal current. The results of these calculations are contained on pages 6 to 18 for the observational (current meter) data, and on pages 20 to 31 for the simulated (model) data. To simplify the presentation, the derived quantities have been arranged geographically in one degree by one degree squares. The position at the beginning of the set refers to the lower right hand (or south-east) corner of the box.

All of the available observational data have been reported in the tables. To avoid an overly cluttered presentation on the map, all of the observations within 0.05 degrees in either latitude or longitude (roughly 3 nautical miles) were combined regardless of the depth of observation. The average principal axes of variance were computed from the combined variances and co-variances of the components measured within a given horizontal grid square.

To reduce the model data, the original data set on the 4' x 4' grid were averaged as above to a 0.1 x 0.1 deg. (or 6' x 6') grid and the even grid points (i.e. 0.2 x 0.2 deg.) selected. Both the tables and the map display the same set of information.

Acknowledgements

A large portion of the initial data assembly and analysis was done by Helen Hayden, Roger Pettipas, Maria Jose' Graca and Lynda MacGillivray. Sylvain de Margerie provided the harmonic constituent files used in the analysis and maps that appear in the appendices. Peter Smith provided the algorithm to compute the principal axes from the harmonic constituents.

References

Greenberg D. 1983. Modelling of the Mean Barotropic Circulation in the Bay of Fundy and Gulf of Maine. J. Phys. Oceanogr. Vol. 13, No. 5, p. 886-904.

Gregory, D.N. and P.C. Smith 1988. Current Statistics of the Scotian Shelf and Slope. Can. Tech. Rep. Hydrogr. Ocean Sci. No. 106: iv + 197 pp.

Gregory, D.N. 1988. Bedford Institute of Oceanography Inventory of Moored Current Meters. Physical and Chemical Sciences Branch Internal Report March 1988

Lively, R.R. 1979. Current Meter and Meteorlogical Observations on the Scotian Shelf Dec. 1975 to Jan. 1978 Vol. I & II Data Series BI-D-79-1

Lively, R.R. 1984. Current Meter, Meteorlogical, and Sea Level Observations Off Cape Sable Nova Scotia. Can. Tech. Rep. Hydrogr. Ocean. Sci. 40: vi + 494 pp.

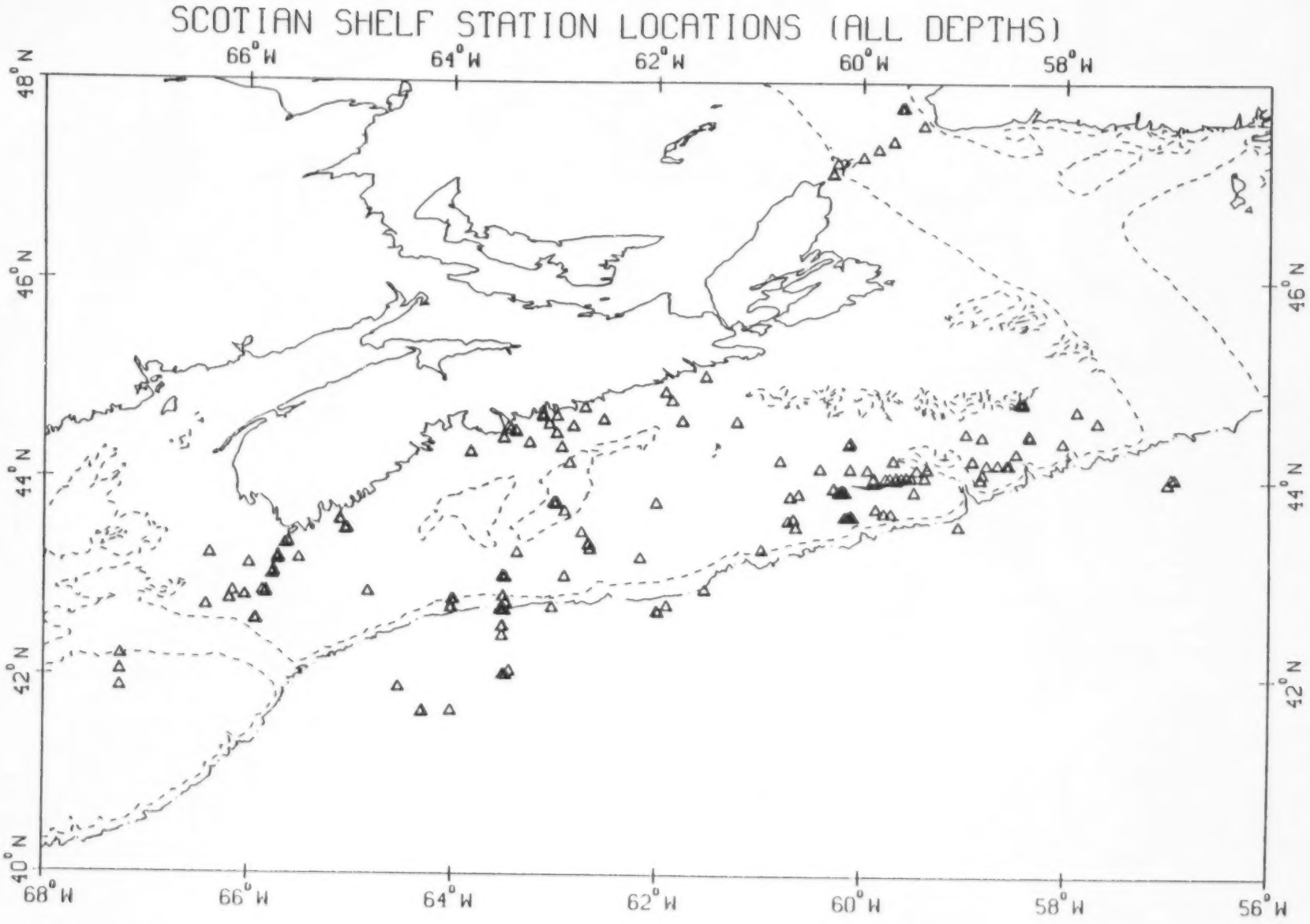
Lively, R.R. 1988. Current, Meteorlogical and Sea Level Observations for Browns Bank, Nova Scotia. Can. Tech. Rep. Hydrog. Ocean. Sci. (in progress)

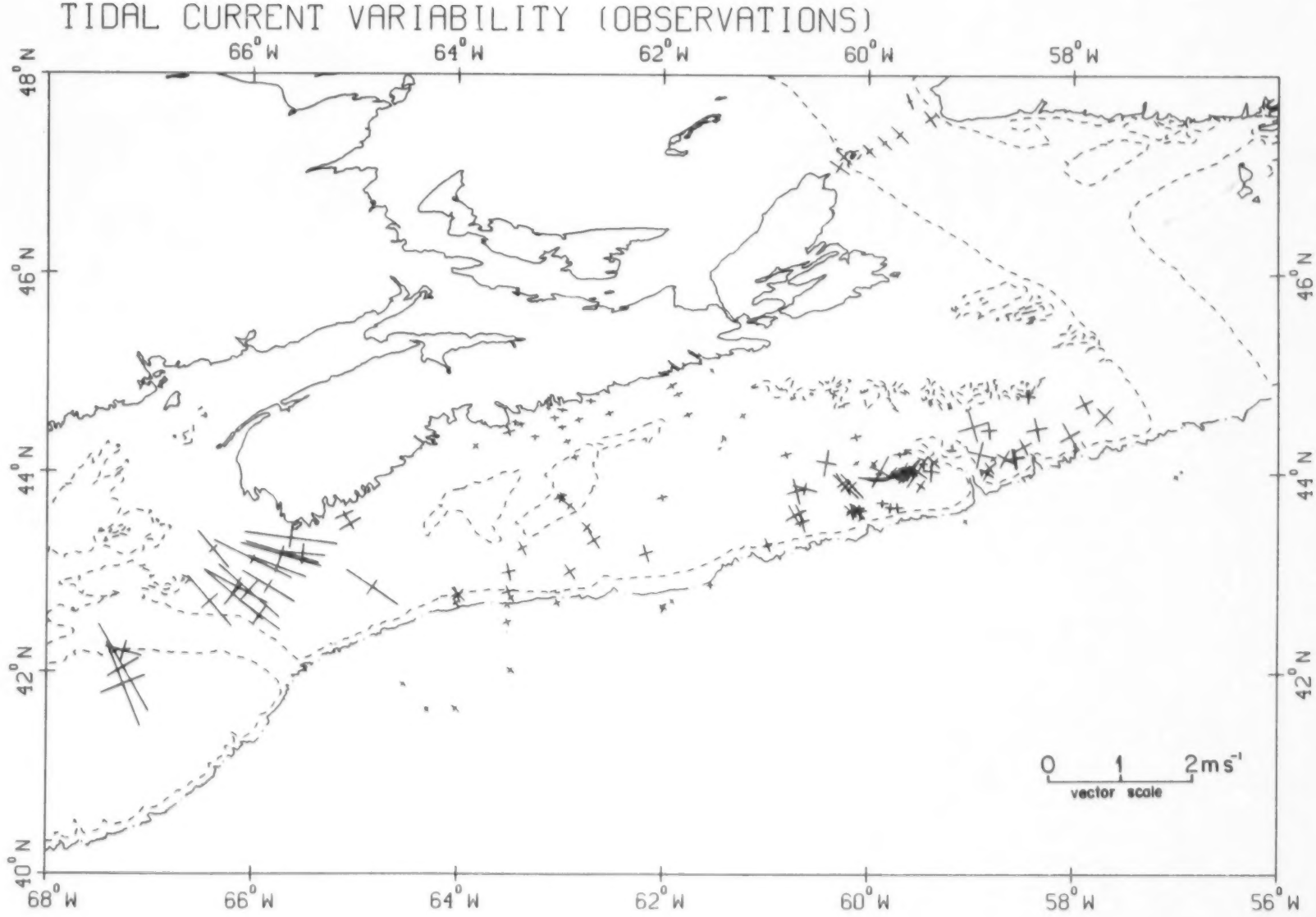
Lively, R.R. 1988. Current Meter, Meterlogical, Sea Level, and Hydrographic Observations for the CASP Experiment off the Coast of Nova Scotia November 1985 to April 1986 Can. Tech. Rep. Hydrogr. Ocean. Sci. 100 vii + 428 pp.

de Margerie, S. 1985. Barotropic Tidal Circulation of the Scotian Shelf. Canadian Contractor Report of Hydrogr. Ocean. Sci. OSC 84-00218 iv + 33 pp.

de Margerie S. and K. Lank. 1986. Tidal Circulation of the Scotian Shelf and Grand Banks. Canadian Contractor Report of Hydrogr. Ocean. Sci. prepared under contract no. 08SC.FP901-5-X515 for the Department of Fisheries and Oceans. v + 18 pp.

Petrie B. 1982. Aspects of the Circulation on the Newfoundland Continental Shelf. Can. Tech. Rep. Hydrogr. Ocean. Sci. No. 11: 78pp.


SCOTIAN SHELF STATION LOCATIONS (ALL DEPTHS)
66°W
64°W
62°W
60°W
58°W
48°N
46°N
44°N
42°N
40°N
68°W
66°W
64°W
62°W
60°W
58°W
56°W
46°N
44°N
42°N


TIDAL CURRENT VARIABILITY (OBSERVATIONS)
66°W
64°W
62°W
60°W
58°W
48°N
46°N
44°N
42°N
40°N
68°W
56°W
0 1 2ms⁻¹
vector scale

SCOTIAN SHELF TIDAL CURRENT VARIABILITY

Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-41 N 64 W-							
1981	41 37.70N	64 18.10W	3000 M.	2900 M.	25	.014	.008	98
1981	41 37.70N	64 18.10W	3000 M.	1000 M.	64	.016	.005	139
1980	41 38.06N	64 18.00W	3020 M.	1000 M.	119	.011	.004	159
1980	41 38.06N	64 18.00W	3020 M.	2900 M.	119	.012	.004	129
1981	41 38.65N	64 1.00W	3000 M.	200 M.	170	.053	.020	129
1981	41 38.65N	64 17.70W	3000 M.	1000 M.	170	.014	.004	136
1981	41 38.65N	64 17.70W	3000 M.	2900 M.	169	.013	.003	159
1980	41 53.14N	64 31.71W	2525 M.	2400 M.	119	.016	.004	140
1980	41 53.14N	64 31.71W	2525 M.	200 M.	119	.047	.008	134
1980	41 53.14N	64 31.71W	2525 M.	1000 M.	119	.019	.003	120
1980	41 53.14N	64 31.71W	2525 M.	500 M.	119	.028	.009	112
	-41 N 67 W-							
1978	41 52.60N	67 15.20W	46 M.	40 M.	19	.478	.256	152
1978	41 52.60N	67 15.20W	46 M.	15 M.	24	.655	.341	156
1978	41 52.60N	67 15.20W	46 M.	30 M.	24	.606	.311	160
1978	41 52.60N	67 15.20W	46 M.	30 M.	24	.606	.311	160
	-42 N 61 W-							
1968	42 39.10N	61 59.40W	1500 M.	1500 M.	50	.007	.005	87
1980	42 43.20N	61 54.48W	1400 M.	840 M.	34	.025	.012	135
1982	42 52.92N	61 32.16W	1140 M.	20 M.	29	.045	.038	102
1982	42 52.92N	61 32.16W	1140 M.	570 M.	65	.023	.008	158
1982	42 52.92N	61 32.16W	1140 M.	1120 M.	65	.036	.022	10
	-42 N 62 W-							
1980	42 39.84N	62 .30W	1500 M.	208 M.	34	.032	.017	48
1980	42 39.84N	62 .30W	1500 M.	1465 M.	34	.027	.014	123
1980	42 39.84N	62 .30W	1500 M.	780 M.	34	.031	.017	141
	-42 N 63 W-							
1976	42 1.01N	63 28.72W	2552 M.	2532 M.	106	.009	.004	8
1976	42 1.01N	63 28.72W	2552 M.	72 M.	106	.050	.018	128
1976	42 1.01N	63 28.72W	2552 M.	1502 M.	52	.007	.005	50
1976	42 1.17N	63 30.65W	2556 M.	76 M.	108	.075	.033	135
1976	42 1.17N	63 30.65W	2556 M.	1506 M.	106	.009	.004	80
1976	42 1.17N	63 30.65W	2556 M.	2536 M.	26	.013	.006	17
1976	42 1.42N	63 29.90W	2560 M.	80 M.	106	.081	.042	121
1976	42 1.42N	63 29.90W	2560 M.	80 M.	106	.081	.042	121
1976	42 1.42N	63 29.90W	2560 M.	1510 M.	108	.012	.003	69
1977	42 3.34N	63 26.63W	2557 M.	77 M.	96	.043	.023	107
1977	42 3.34N	63 26.63W	2557 M.	1507 M.	96	.013	.004	136
1977	42 3.34N	63 26.63W	2557 M.	2537 M.	96	.009	.004	65
1967	42 24.60N	63 31.00W	1775 M.	999 M.	15	.018	.013	139
1967	42 24.60N	63 31.00W	1750 M.	150 M.	22	.024	.021	58
1976	42 30.10N	63 31.16W	1555 M.	151 M.	108	.048	.028	61
1976	42 30.10N	63 31.16W	1555 M.	51 M.	108	.081	.063	47
1976	42 30.10N	63 31.16W	1555 M.	1535 M.	108	.024	.006	153
1977	42 30.50N	63 30.95W	1559 M.	55 M.	97	.025	.015	69
1977	42 30.50N	63 30.95W	1559 M.	155 M.	98	.025	.009	80
1977	42 30.50N	63 30.95W	1559 M.	1539 M.	97	.020	.004	130
1976	42 30.50N	63 31.11W	1542 M.	38 M.	57	.091	.071	78
1976	42 30.50N	63 31.11W	1542 M.	1522 M.	57	.026	.007	150
1976	42 30.50N	63 31.11W	1542 M.	138 M.	57	.051	.027	79
1976	42 30.70N	63 30.44W	1550 M.	1530 M.	105	.026	.006	140

SCOTIAN SHELF TIDAL CURRENT VARIABILITY

Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-42 N 63 W-							
1967	42 40.00N	63 30.00W	1150 M.	20 M.	53	.132	.105	98
1967	42 40.00N	63 30.00W	1150 M.	500 M.	48	.027	.015	106
1967	42 40.00N	63 30.00W	1150 M.	150 M.	53	.051	.039	114
1967	42 40.00N	63 30.00W	1150 M.	500 M.	13	.034	.023	83
1976	42 40.16N	63 29.32W	1027 M.	67 M.	106	.054	.041	157
1976	42 40.16N	63 29.32W	1027 M.	167 M.	106	.040	.025	142
1976	42 40.16N	63 29.32W	1027 M.	517 M.	36	.021	.013	121
1976	42 40.16N	63 29.32W	1027 M.	707 M.	106	.020	.013	152
1976	42 40.16N	63 29.32W	1027 M.	1007 M.	106	.021	.013	45
1968	42 40.40N	63 29.90W	1150 M.	20 M.	62	.068	.062	91
1968	42 40.40N	63 29.90W	800 M.	150 M.	42	.056	.037	100
1968	42 40.40N	63 29.90W	1150 M.	980 M.	62	.015	.012	90
1976	42 40.40N	63 31.02W	1029 M.	709 M.	105	.031	.011	149
1976	42 40.40N	63 31.02W	1029 M.	69 M.	105	.053	.042	115
1976	42 40.40N	63 31.02W	1029 M.	1009 M.	105	.023	.015	137
1976	42 40.40N	63 31.02W	1029 M.	169 M.	105	.042	.024	126
1977	42 40.52N	63 29.83W	1010 M.	50 M.	96	.058	.049	160
1977	42 40.52N	63 29.83W	1010 M.	150 M.	96	.050	.037	154
1977	42 40.52N	63 29.83W	1010 M.	990 M.	96	.032	.011	48
1977	42 40.52N	63 29.83W	1010 M.	500 M.	96	.024	.007	129
1977	42 40.54N	63 30.51W	1023 M.	63 M.	179	.043	.032	126
1977	42 40.54N	63 30.51W	1023 M.	163 M.	179	.041	.024	140
1977	42 40.54N	63 30.51W	1023 M.	513 M.	179	.028	.003	138
1977	42 40.54N	63 30.51W	800 M.	113 M.	158	.038	.021	136
1977	42 40.54N	63 30.51W	1023 M.	1003 M.	34	.040	.016	4
1968	42 40.80N	63 32.40W	1430 M.	980 M.	37	.057	.021	162
1968	42 40.80N	63 32.40W	1430 M.	200 M.	37	.053	.034	98
1968	42 40.80N	63 32.40W	1430 M.	150 M.	14	.060	.051	68
1968	42 40.80N	63 32.40W	1430 M.	500 M.	29	.013	.012	85
1976	42 40.85N	63 30.82W	995 M.	135 M.	99	.032	.018	130
1976	42 40.85N	63 30.82W	995 M.	35 M.	99	.046	.037	3
1976	42 40.90N	63 31.70W	1150 M.	990 M.	115	.018	.015	35
1984	42 42.05N	63 1.69W	1355 M.	38 M.	83	.052	.034	167
1984	42 42.05N	63 1.69W	1355 M.	1276 M.	97	.030	.007	81
1984	42 42.05N	63 1.69W	1355 M.	192 M.	51	.026	.018	143
1976	42 44.91N	63 28.94W	729 M.	709 M.	24	.036	.012	71
1976	42 44.91N	63 28.94W	729 M.	249 M.	109	.047	.025	146
1977	42 44.91N	63 29.13W	711 M.	501 M.	97	.032	.014	55
1977	42 44.91N	63 29.13W	711 M.	691 M.	97	.027	.013	56
1977	42 44.91N	63 29.13W	711 M.	231 M.	97	.057	.036	147
1976	42 45.03N	63 28.65W	699 M.	219 M.	57	.063	.039	140
1976	42 45.03N	63 28.65W	699 M.	679 M.	57	.023	.010	59
1976	42 45.21N	63 28.62W	692 M.	672 M.	108	.019	.015	70
1976	42 45.21N	63 28.62W	692 M.	212 M.	108	.046	.027	144
1977	42 46.94N	63 59.52W	228 M.	30 M.	84	.109	.084	136
1977	42 46.94N	63 59.52W	228 M.	30 M.	84	.109	.084	136
1976	42 48.37N	63 30.52W	256 M.	65 M.	102	.091	.061	179
1976	42 48.37N	63 30.52W	256 M.	165 M.	102	.037	.019	108
1977	42 48.37N	63 30.60W	246 M.	55 M.	100	.084	.075	141
1977	42 48.37N	63 30.60W	246 M.	155 M.	100	.070	.049	101
1977	42 48.37N	63 30.60W	246 M.	225 M.	99	.081	.068	90
1975	42 48.38N	63 30.27W	275 M.	224 M.	115	.053	.045	155
1975	42 48.38N	63 30.27W	275 M.	54 M.	115	.083	.075	34
1975	42 48.38N	63 30.27W	275 M.	154 M.	115	.070	.049	146
1976	42 48.38N	63 30.27W	275 M.	54 M.	90	.077	.062	177
1976	42 48.47N	63 30.26W	242 M.	151 M.	60	.095	.067	128
1976	42 48.47N	63 30.26W	242 M.	51 M.	60	.093	.065	177
1976	42 48.47N	63 30.26W	242 M.	221 M.	60	.071	.066	167
1976	42 48.47N	63 30.60W	241 M.	154 M.	90	.074	.052	128

SCOTIAN SHELF TIDAL CURRENT VARIABILITY

Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-42 N 63 W-							
1976	42 48.47N	63 30.60W	750 M.	224 M.	90	.049	.046	19
1977	42 48.57N	63 30.33W	240 M.	49 M.	180	.078	.057	157
1977	42 48.57N	63 30.33W	240 M.	219 M.	180	.083	.064	1
1977	42 48.57N	63 30.33W	240 M.	99 M.	180	.079	.055	145
1977	42 48.57N	63 30.33W	240 M.	149 M.	180	.076	.054	137
1976	42 48.67N	63 30.05W	275 M.	20 M.	70	.112	.091	0
1977	42 48.68N	63 30.69W	224 M.	26 M.	57	.008	.005	162
1977	42 48.68N	63 30.69W	224 M.	27 M.	73	.077	.051	159
1977	42 48.69N	63 30.60W	226 M.	23 M.	87	.115	.095	166
1976	42 48.78N	63 30.72W	234 M.	31 M.	23	.100	.057	14
1976	42 48.79N	63 30.76W	232 M.	211 M.	104	.060	.044	169
1976	42 48.79N	63 30.76W	232 M.	41 M.	104	.097	.069	169
1976	42 48.79N	63 30.76W	232 M.	141 M.	104	.084	.054	147
1976	42 48.88N	63 30.31W	222 M.	19 M.	23	.096	.079	148
1976	42 48.88N	63 30.31W	222 M.	20 M.	23	.096	.073	148
1976	42 48.89N	63 30.24W	224 M.	21 M.	40	.098	.092	49
	-42 N 64 W-							
1976	42 41.53N	64 .78W	703 M.	683 M.	58	.021	.007	50
1976	42 41.53N	64 .78W	703 M.	223 M.	58	.067	.030	126
1976	42 41.58N	64 1.65W	735 M.	255 M.	108	.060	.019	136
1976	42 41.58N	64 1.65W	735 M.	715 M.	106	.054	.013	2
1977	42 41.80N	64 .58W	711 M.	231 M.	62	.030	.013	150
1977	42 41.80N	64 .58W	711 M.	691 M.	96	.037	.009	164
1976	42 42.01N	64 .72W	693 M.	213 M.	109	.066	.025	130
1976	42 42.01N	64 .72W	693 M.	673 M.	109	.041	.006	0
1977	42 46.66N	64 .10W	242 M.	221 M.	178	.088	.030	176
1976	42 46.79N	64 .71W	230 M.	39 M.	57	.133	.115	158
1976	42 46.79N	64 .71W	230 M.	209 M.	57	.078	.040	174
1976	42 46.85N	64 .26W	240 M.	49 M.	108	.118	.092	140
1976	42 46.85N	64 .26W	240 M.	219 M.	69	.099	.037	176
1976	42 46.94N	64 .30W	245 M.	54 M.	107	.119	.087	132
1976	42 46.94N	64 .30W	245 M.	224 M.	109	.069	.029	153
1977	42 46.96N	64 .08W	239 M.	48 M.	68	.116	.076	139
1979	42 51.00N	64 49.71W	104 M.	9 M.	72	.421	.114	122
1979	42 51.00N	64 49.93W	104 M.	44 M.	72	.440	.109	124
1979	42 51.00N	64 49.93W	104 M.	94 M.	50	.356	.073	131
	-42 N 65 W-							
1980	42 33.78N	65 55.67W	107 M.	12 M.	149	.322	.136	126
1979	42 33.82N	65 55.63W	109 M.	49 M.	103	.360	.193	121
1979	42 33.82N	65 55.63W	109 M.	99 M.	71	.269	.091	138
1980	42 33.94N	65 55.77W	107 M.	97 M.	148	.307	.104	130
1979	42 34.00N	65 55.20W	109 M.	14 M.	102	.342	.147	126
1979	42 34.04N	65 55.53W	110 M.	9 M.	146	.364	.171	125
1979	42 34.09N	65 55.70W	110 M.	94 M.	162	.264	.059	134
1979	42 34.09N	65 55.70W	110 M.	44 M.	162	.352	.178	124
1979	42 34.25N	65 56.21W	105 M.	96 M.	71	.270	.065	136
1979	42 34.25N	65 56.21W	105 M.	46 M.	71	.377	.192	119
1979	42 34.34N	65 56.06W	105 M.	9 M.	71	.343	.128	123
1979	42 50.00N	65 50.10W	108 M.	13 M.	45	.050	.033	156
1979	42 50.05N	65 50.13W	108 M.	98 M.	102	.360	.080	128
1979	42 50.05N	65 50.13W	108 M.	48 M.	103	.459	.120	121
1979	42 51.27N	65 49.48W	110 M.	11 M.	85	.371	.069	118
1979	42 51.27N	65 49.48W	108 M.	12 M.	161	.394	.078	121
1980	42 51.30N	65 49.44W	109 M.	14 M.	148	.412	.103	123
1980	42 51.30N	65 49.64W	108 M.	48 M.	148	.447	.113	121

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Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-42 N 65 W-							
1979	42 51.40N	65 49.50W	108 M.	98 M.	161	.330	.059	127
1983	42 51.54N	65 51.49W	101 M.	6 M.	131	.436	.086	118
1983	42 51.54N	65 51.49W	107 M.	47 M.	201	.456	.093	123
1983	42 51.54N	65 51.49W	107 M.	27 M.	201	.448	.088	124
1983	42 51.54N	65 51.49W	107 M.	97 M.	201	.350	.056	135
1983	42 51.63N	65 51.92W	110 M.	50 M.	212	.439	.089	115
1983	42 51.64N	65 51.68W	110 M.	15 M.	212	.404	.072	118
	-42 N 66 W-							
1983	42 42.28N	66 24.85W	110 M.	100 M.	198	.314	.015	154
1983	42 42.28N	66 24.85W	110 M.	30 M.	198	.454	.128	138
1983	42 42.28N	66 24.85W	110 M.	30 M.	198	.454	.128	138
1983	42 42.28N	66 25.08W	111 M.	16 M.	102	.485	.154	137
1983	42 46.29N	66 11.36W	54 M.	39 M.	210	.482	.152	128
1983	42 46.36N	66 11.28W	54 M.	14 M.	87	.573	.212	134
1983	42 46.41N	66 11.10W	53 M.	38 M.	133	.491	.161	131
1983	42 46.41N	66 11.10W	53 M.	13 M.	35	.564	.212	131
1983	42 48.39N	66 1.88W	71 M.	31 M.	200	.549	.171	131
1983	42 48.39N	66 1.88W	71 M.	61 M.	200	.404	.084	133
1984	42 48.41N	66 1.91W	71 M.	31 M.	189	.547	.163	129
1983	42 48.42N	66 1.89W	72 M.	32 M.	213	.519	.151	134
1983	42 48.52N	66 1.97W	71 M.	16 M.	200	.587	.199	130
1984	42 48.52N	66 2.42W	68 M.	58 M.	175	.427	.078	132
1984	42 48.52N	66 2.42W	68 M.	28 M.	175	.576	.168	129
1984	42 48.53N	66 2.01W	70 M.	15 M.	189	.565	.186	131
1983	42 50.90N	66 9.25W	115 M.	105 M.	203	.342	.036	137
1983	42 50.90N	66 9.25W	115 M.	35 M.	203	.478	.123	118
1983	42 50.90N	66 9.25W	115 M.	55 M.	203	.433	.085	120
1983	42 50.94N	66 9.41W	117 M.	22 M.	203	.516	.144	114
	-42 N 67 W-							
1978	42 2.50N	67 15.20W	46 M.	14 M.	24	.712	.228	147
1978	42 2.50N	67 15.20W	46 M.	30 M.	24	.597	.206	153
1978	42 2.50N	67 15.20W	46 M.	30 M.	24	.597	.206	153
1978	42 2.50N	67 15.20W	46 M.	15 M.	24	.701	.230	155
1978	42 12.10N	67 15.00W	203 M.	175 M.	19	.071	.057	20
1978	42 12.10N	67 15.00W	203 M.	30 M.	23	.332	.155	98
1978	42 12.10N	67 15.00W	203 M.	30 M.	23	.332	.155	98
1978	42 12.10N	67 15.00W	203 M.	75 M.	23	.306	.115	129
1978	42 12.10N	67 15.00W	203 M.	40 M.	23	.317	.139	97
	-43 N 57 W-							
1975	43 58.40N	57 16.50W	2750 M.	50 M.	51	.024	.020	143
1975	43 58.40N	57 16.50W	2750 M.	350 M.	51	.015	.014	178
	-43 N 59 W-							
1968	43 31.80N	59 3.10W	1800 M.	500 M.	33	.016	.012	134
1968	43 31.80N	59 3.10W	1800 M.	200 M.	33	.017	.010	141
1968	43 31.80N	59 3.10W	1800 M.	1500 M.	13	.034	.029	167
1986	43 39.74N	59 47.00W	93 M.	45 M.	63	.045	.017	177
1986	43 39.74N	59 47.00W	93 M.	20 M.	63	.074	.040	94
1986	43 39.74N	59 47.00W	93 M.	71 M.	63	.074	.039	8
1984	43 39.74N	59 42.86W	95 M.	75 M.	34	.068	.054	98
1984	43 39.74N	59 42.86W	95 M.	15 M.	109	.073	.048	80
1984	43 39.74N	59 42.86W	95 M.	48 M.	38	.077	.047	95

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Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-43 N 59 W-							
1985	43 42.49N	59 51.50W	72 M.	63 M.	91	.064	.038	88
1986	43 42.51N	59 52.00W	74 M.	39 M.	84	.097	.059	99
1986	43 42.51N	59 52.00W	74 M.	65 M.	84	.076	.043	85
1985	43 42.52N	59 51.52W	72 M.	2 M.	91	.043	.020	105
1982	43 52.75N	59 29.19W	51 M.	50 M.	26	.082	.047	35
	-43 N 60 W-							
1984	43 17.44N	60 58.82W	160 M.	20 M.	49	.089	.063	156
1984	43 17.44N	60 58.82W	160 M.	136 M.	49	.082	.044	165
1985	43 31.05N	60 38.55W	73 M.	4 M.	47	.123	.072	176
1985	43 31.05N	60 38.55W	73 M.	40 M.	47	.143	.105	157
1985	43 31.05N	60 38.55W	73 M.	59 M.	47	.106	.077	156
1985	43 35.00N	60 43.13W	60 M.	50 M.	43	.150	.091	164
1985	43 35.00N	60 43.13W	60 M.	15 M.	43	.218	.141	162
1985	43 35.02N	60 43.15W	60 M.	19 M.	43	.130	.082	91
1984	43 36.30N	60 39.94W	76 M.	66 M.	78	.124	.075	168
1984	43 36.30N	60 39.94W	76 M.	20 M.	78	.119	.078	155
1984	43 36.30N	60 40.10W	76 M.	20 M.	42	.115	.078	135
1984	43 36.30N	60 40.10W	76 M.	18 M.	26	.120	.088	127
1984	43 37.29N	60 5.37W	75 M.	51 M.	10	.083	.053	112
1984	43 37.29N	60 5.37W	75 M.	72 M.	10	.185	.098	169
1984	43 37.29N	60 5.37W	75 M.	51 M.	32	.096	.053	115
1984	43 37.39N	60 9.40W	75 M.	28 M.	56	.089	.056	173
1984	43 37.40N	60 5.08W	75 M.	13 M.	32	.086	.043	76
1984	43 37.40N	60 5.08W	75 M.	72 M.	32	.095	.086	128
1984	43 37.40N	60 5.08W	75 M.	11 M.	10	.074	.042	61
1983	43 37.62N	60 10.20W	85 M.	75 M.	102	.031	.021	128
1983	43 37.62N	60 10.20W	76 M.	58 M.	38	.081	.050	139
1983	43 37.62N	60 10.20W	76 M.	72 M.	38	.048	.035	127
1983	43 37.65N	60 6.43W	83 M.	42 M.	58	.103	.063	143
1983	43 37.65N	60 6.43W	83 M.	66 M.	59	.101	.052	139
1983	43 37.65N	60 10.36W	77 M.	40 M.	57	.093	.064	136
1983	43 37.65N	60 10.36W	77 M.	7 M.	57	.093	.058	128
1983	43 38.00N	60 6.00W	83 M.	7 M.	59	.082	.049	121
1986	43 38.39N	60 8.17W	75 M.	11 M.	44	.107	.069	140
1986	43 38.42N	60 8.21W	75 M.	65 M.	44	.092	.065	130
1986	43 38.42N	60 8.21W	75 M.	48 M.	44	.123	.070	129
1983	43 39.00N	60 6.42W	77 M.	66 M.	57	.112	.072	141
1986	43 49.54N	60 42.01W	45 M.	44 M.	43	.135	.079	3
1986	43 49.54N	60 42.01W	45 M.	10 M.	43	.207	.148	157
1986	43 49.54N	60 42.01W	45 M.	25 M.	43	.148	.117	160
1985	43 51.10N	60 37.00W	40 M.	36 M.	85	.144	.071	112
1986	43 51.10N	60 37.00W	40 M.	19 M.	64	.166	.069	97
1986	43 52.52N	60 13.12W	34 M.	30 M.	25	.125	.042	125
1986	43 52.58N	60 13.16W	34 M.	8 M.	46	.240	.082	134
1986	43 52.58N	60 13.16W	34 M.	17 M.	46	.268	.113	133
1986	43 52.73N	60 9.50W	34 M.	5 M.	62	.213	.062	136
1985	43 52.73N	60 13.85W	38 M.	16 M.	34	.192	.040	133
1985	43 52.73N	60 13.85W	38 M.	37 M.	58	.066	.023	127
1985	43 52.73N	60 13.85W	38 M.	21 M.	57	.147	.038	143
1986	43 53.36N	60 10.33W	34 M.	9 M.	61	.217	.054	138
1986	43 53.98N	60 10.80W	34 M.	25 M.	61	.159	.045	136
1986	43 53.98N	60 10.80W	34 M.	17 M.	26	.111	.042	128
1972	43 54.00N	60 12.40W	28 M.	12 M.	42	.331	.101	140
1983	43 54.60N	60 16.71W	25 M.	24 M.	162	.145	.077	155
1983	43 55.12N	60 16.17W	21 M.	20 M.	146	.143	.089	166

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Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-43 N 62 W-							
1967	43 .90N	62 54.50W	126 M.	118 M.	27	.091	.061	146
1967	43 .90N	62 54.50W	125 M.	50 M.	27	.119	.085	146
1983	43 12.12N	62 9.90W	100 M.	21 M.	18	.128	.103	161
1983	43 12.12N	62 9.90W	100 M.	86 M.	28	.092	.072	161
1983	43 12.12N	62 9.90W	100 M.	21 M.	28	.136	.098	2
1983	43 12.12N	62 9.90W	100 M.	54 M.	93	.100	.066	160
1983	43 12.12N	62 9.90W	100 M.	21 M.	93	.128	.092	160
1983	43 12.12N	62 9.90W	100 M.	83 M.	18	.087	.070	170
1983	43 12.12N	62 9.90W	100 M.	55 M.	28	.098	.078	158
1983	43 12.12N	62 9.90W	100 M.	85 M.	93	.085	.061	167
1983	43 12.12N	62 9.90W	100 M.	53 M.	18	.123	.101	169
1967	43 17.30N	62 39.50W	97 M.	20 M.	21	.156	.096	147
1967	43 17.30N	62 39.50W	185 M.	81 M.	48	.105	.067	157
1967	43 17.30N	62 39.50W	97 M.	50 M.	48	.021	.015	148
1968	43 20.00N	62 40.55W	95 M.	95 M.	38	.012	.010	106
1968	43 20.00N	62 40.55W	95 M.	50 M.	38	.063	.055	178
1967	43 20.15N	62 40.10W	95 M.	20 M.	49	.144	.103	148
1967	43 20.28N	62 40.47W	95 M.	50 M.	53	.147	.117	144
1967	43 20.28N	62 40.47W	95 M.	20 M.	53	.100	.076	147
1968	43 20.40N	62 40.80W	95 M.	50 M.	41	.132	.099	165
1968	43 20.40N	62 40.80W	95 M.	20 M.	41	.152	.101	142
1967	43 20.50N	62 40.00W	95 M.	20 M.	65	.143	.090	142
1967	43 20.50N	62 40.00W	95 M.	95 M.	64	.090	.061	152
1968	43 27.60N	62 44.40W	98 M.	27 M.	49	.109	.072	144
1968	43 27.60N	62 44.40W	98 M.	53 M.	22	.077	.051	112
1968	43 27.60N	62 44.40W	98 M.	98 M.	20	.011	.007	5
1968	43 27.60N	62 44.40W	98 M.	55 M.	47	.067	.042	115
1968	43 40.40N	62 54.40W	232 M.	105 M.	48	.033	.029	170
1968	43 40.40N	62 54.40W	240 M.	238 M.	44	.010	.007	2
1968	43 40.40N	62 54.40W	205 M.	61 M.	46	.057	.029	147
1968	43 44.91N	62 59.35W	255 M.	20 M.	25	.067	.026	76
1968	43 44.91N	62 59.35W	250 M.	95 M.	50	.047	.037	32
1968	43 44.91N	62 59.35W	250 M.	250 M.	50	.050	.034	175
1968	43 45.18N	62 59.69W	255 M.	250 M.	47	.061	.038	165
1968	43 45.18N	62 59.69W	255 M.	50 M.	46	.051	.028	47
1968	43 45.56N	62 .50W	95 M.	50 M.	70	.057	.026	75
1967	43 45.70N	62 59.80W	250 M.	20 M.	45	.088	.049	78
1967	43 45.70N	62 59.80W	255 M.	250 M.	29	.070	.057	12
1967	43 46.00N	62 59.00W	255 M.	50 M.	64	.053	.034	72
1967	43 46.00N	62 59.00W	255 M.	250 M.	64	.057	.037	165
	-43 N 63 W-							
1976	43 .13N	63 29.64W	172 M.	152 M.	59	.075	.058	2
1976	43 .13N	63 29.64W	172 M.	54 M.	59	.013	.006	78
1976	43 .20N	63 29.63W	175 M.	155 M.	104	.009	.006	166
1976	43 .20N	63 29.63W	175 M.	60 M.	104	.077	.073	114
1976	43 .52N	63 29.12W	168 M.	20 M.	53	.177	.129	169
1976	43 .52N	63 29.12W	168 M.	17 M.	59	.125	.095	172
1976	43 .57N	63 30.48W	172 M.	54 M.	107	.120	.091	174
1976	43 .60N	63 29.00W	175 M.	30 M.	103	.127	.089	172
1976	43 .60N	63 29.00W	175 M.	30 M.	103	.127	.089	172
1977	43 .69N	63 30.60W	170 M.	52 M.	182	.082	.055	170
1977	43 .69N	63 30.60W	170 M.	150 M.	182	.078	.051	173
1977	43 .69N	63 30.60W	170 M.	100 M.	182	.088	.065	160
1977	43 .93N	63 30.52W	171 M.	29 M.	72	.052	.041	49
1977	43 .93N	63 30.52W	171 M.	28 M.	55	.111	.087	156
1977	43 .98N	63 30.71W	173 M.	55 M.	99	.099	.079	168
1977	43 .98N	63 30.71W	173 M.	153 M.	99	.087	.066	167

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Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-43 N 63 W-							
1976	43 1.03N	63 30.44W	178 M.	24 M.	106	.130	.097	162
1976	43 1.03N	63 30.44W	178 M.	30 M.	106	.130	.097	162
1977	43 1.42N	63 30.70W	169 M.	21 M.	84	.140	.097	166
1967	43 15.20N	63 22.30W	136 M.	130 M.	28	.089	.040	159
1967	43 15.20N	63 22.30W	137 M.	50 M.	26	.101	.059	144
1968	43 45.56N	63 .50W	255 M.	20 M.	70	.057	.019	71
1968	43 45.56N	63 .50W	255 M.	250 M.	13	.067	.049	174
1968	43 45.56N	63 .50W	255 M.	95 M.	69	.050	.025	61
1967	43 45.70N	63 .70W	75 M.	50 M.	51	.075	.021	60
1967	43 45.70N	63 .70W	255 M.	250 M.	51	.064	.054	16
1967	43 45.95N	63 .86W	260 M.	20 M.	51	.068	.016	67
1967	43 45.95N	63 .86W	255 M.	250 M.	51	.028	.020	1
1967	43 45.95N	63 .86W	260 M.	50 M.	51	.066	.016	73
	-43 N 65 W-							
1978	43 1.22N	65 46.27W	110 M.	16 M.	45	.402	.033	102
1978	43 1.62N	65 46.40W	110 M.	100 M.	82	.348	.072	117
1978	43 1.62N	65 46.40W	110 M.	50 M.	170	.430	.054	104
1979	43 2.45N	65 45.83W	113 M.	103 M.	156	.344	.057	117
1979	43 2.45N	65 45.83W	113 M.	53 M.	174	.493	.065	107
1979	43 2.47N	65 46.00W	113 M.	19 M.	174	.397	.049	103
1979	43 2.47N	65 46.00W	112 M.	18 M.	174	.382	.045	105
1984	43 2.79N	65 45.13W	111 M.	51 M.	180	.439	.053	107
1984	43 2.79N	65 45.13W	111 M.	101 M.	180	.336	.064	119
1984	43 2.81N	65 45.14W	110 M.	50 M.	184	.452	.068	109
1984	43 2.81N	65 45.14W	110 M.	100 M.	184	.323	.069	120
1982	43 2.84N	65 45.83W	110 M.	23 M.	219	.403	.033	103
1982	43 2.84N	65 45.83W	110 M.	108 M.	219	.320	.068	118
1982	43 2.84N	65 45.83W	110 M.	58 M.	12	.430	.103	106
1984	43 2.87N	65 45.29W	110 M.	10 M.	184	.417	.021	101
1984	43 2.89N	65 45.33W	108 M.	13 M.	180	.462	.036	105
1982	43 2.89N	65 45.55W	102 M.	92 M.	158	.339	.064	122
1982	43 2.89N	65 45.55W	102 M.	42 M.	158	.451	.047	106
1982	43 2.91N	65 45.29W	108 M.	13 M.	158	.455	.042	108
1983	43 2.93N	65 45.49W	110 M.	100 M.	215	.330	.067	115
1983	43 2.93N	65 45.49W	110 M.	50 M.	215	.466	.075	114
1983	43 2.93N	65 45.71W	111 M.	16 M.	160	.397	.033	104
1983	43 2.95N	65 45.52W	110 M.	15 M.	196	.446	.033	105
1983	43 2.95N	65 45.73W	112 M.	102 M.	196	.288	.065	117
1983	43 2.95N	65 45.73W	112 M.	52 M.	196	.421	.054	110
1981	43 3.30N	65 45.30W	110 M.	14 M.	26	.487	.090	100
1981	43 3.30N	65 45.30W	110 M.	100 M.	120	.350	.057	126
1981	43 3.30N	65 45.30W	110 M.	15 M.	120	.477	.046	105
1981	43 3.30N	65 45.30W	110 M.	43 M.	26	.431	.051	103
1981	43 3.30N	65 45.30W	110 M.	90 M.	232	.385	.054	120
1981	43 3.30N	65 45.30W	110 M.	50 M.	120	.451	.040	111
1981	43 3.30N	65 45.30W	100 M.	93 M.	26	.379	.081	84
1981	43 3.30N	65 45.30W	110 M.	107 M.	17	.511	.095	109
1981	43 3.30N	65 45.30W	110 M.	105 M.	30	.279	.050	116
1981	43 3.30N	65 45.30W	110 M.	100 M.	232	.326	.053	123
1980	43 3.52N	65 45.48W	118 M.	21 M.	149	.419	.030	106
1980	43 3.52N	65 45.48W	118 M.	22 M.	149	.416	.030	105
1979	43 3.53N	65 45.49W	108 M.	14 M.	162	.433	.024	103
1980	43 3.65N	65 45.35W	104 M.	44 M.	27	.474	.066	110
1980	43 3.65N	65 45.35W	108 M.	13 M.	147	.318	.023	89
1980	43 3.65N	65 45.35W	104 M.	94 M.	198	.346	.069	125
1980	43 3.65N	65 45.35W	104 M.	101 M.	198	.261	.054	118
1980	43 3.65N	65 45.35W	104 M.	84 M.	198	.417	.075	123

SCOTIAN SHELF TIDAL CURRENT VARIABILITY

Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-43 N 65 W-							
1979	43 3.67N	65 45.39W	108 M.	87 M.	162	.483	.050	113
1979	43 3.67N	65 45.39W	108 M.	47 M.	162	.475	.041	107
1979	43 3.67N	65 45.39W	108 M.	104 M.	162	.311	.048	118
1979	43 3.67N	65 45.39W	108 M.	97 M.	162	.331	.075	117
1980	43 3.68N	65 45.39W	106 M.	96 M.	149	.356	.055	117
1980	43 3.68N	65 45.39W	106 M.	46 M.	149	.460	.056	109
1969	43 7.68N	65 59.71W	85 M.	80 M.	55	.584	.050	115
1969	43 7.68N	65 59.71W	85 M.	79 M.	55	.558	.045	117
1969	43 7.68N	65 59.71W	85 M.	80 M.	55	.584	.050	115
1979	43 10.52N	65 43.41W	62 M.	30 M.	69	.551	.051	105
1979	43 10.52N	65 43.41W	60 M.	50 M.	145	.393	.063	109
1979	43 10.52N	65 43.41W	60 M.	30 M.	69	.551	.051	105
1979	43 10.58N	65 43.14W	60 M.	15 M.	160	.617	.088	109
1979	43 10.58N	65 43.14W	60 M.	16 M.	160	.618	.091	103
1969	43 11.18N	65 30.57W	80 M.	77 M.	56	.298	.121	95
1982	43 11.44N	65 42.11W	66 M.	21 M.	218	.555	.044	104
1982	43 11.44N	65 42.11W	66 M.	31 M.	218	.490	.056	115
1982	43 11.44N	65 42.11W	66 M.	21 M.	218	.555	.044	104
1982	43 11.44N	65 42.11W	66 M.	46 M.	53	.285	.030	106
1982	43 11.44N	65 42.11W	66 M.	41 M.	218	.410	.072	107
1982	43 11.44N	65 42.11W	66 M.	48 M.	218	.242	.047	105
1981	43 11.70N	65 42.20W	60 M.	30 M.	231	.525	.039	125
1981	43 11.70N	65 42.20W	60 M.	56 M.	26	.272	.081	113
1981	43 11.70N	65 42.20W	60 M.	15 M.	97	.577	.058	121
1981	43 11.70N	65 42.20W	60 M.	50 M.	85	.325	.037	107
1981	43 11.70N	65 42.20W	60 M.	15 M.	120	.588	.070	101
1981	43 11.70N	65 42.20W	60 M.	55 M.	120	.349	.061	103
1981	43 11.70N	65 42.20W	60 M.	29 M.	23	.551	.063	104
1981	43 11.70N	65 42.20W	60 M.	40 M.	231	.431	.061	110
1981	43 11.70N	65 42.20W	60 M.	30 M.	120	.540	.038	101
1981	43 11.70N	65 42.20W	60 M.	29 M.	23	.551	.063	104
1981	43 11.70N	65 42.20W	60 M.	14 M.	26	.629	.095	105
1981	43 11.70N	65 42.20W	60 M.	57 M.	231	.297	.073	107
1981	43 11.70N	65 42.20W	60 M.	57 M.	120	.320	.056	109
1981	43 11.70N	65 42.20W	60 M.	55 M.	231	.323	.078	104
1981	43 11.70N	65 42.20W	60 M.	40 M.	120	.478	.048	105
1981	43 11.70N	65 42.20W	60 M.	30 M.	231	.525	.039	125
1981	43 11.70N	65 42.20W	60 M.	49 M.	26	.371	.101	108
1981	43 11.70N	65 42.20W	60 M.	30 M.	120	.540	.038	101
1981	43 11.70N	65 42.20W	60 M.	39 M.	26	.507	.076	110
1981	43 11.70N	65 42.20W	60 M.	50 M.	120	.397	.063	99
1982	43 11.75N	65 42.27W	57 M.	26 M.	159	.546	.041	106
1982	43 11.75N	65 42.27W	57 M.	47 M.	159	.410	.051	107
1982	43 11.75N	65 42.27W	57 M.	36 M.	159	.477	.044	109
1982	43 11.75N	65 42.27W	57 M.	54 M.	55	.312	.067	109
1980	43 12.17N	65 42.70W	60 M.	15 M.	145	.603	.069	106
1980	43 12.17N	65 42.70W	60 M.	16 M.	145	.604	.077	104
1980	43 12.17N	65 42.87W	59 M.	49 M.	145	.455	.042	109
1980	43 12.17N	65 42.87W	59 M.	29 M.	145	.558	.041	106
1979	43 12.18N	65 43.10W	57 M.	14 M.	162	.641	.087	102
1979	43 12.20N	65 43.21W	57 M.	37 M.	162	.191	.024	107
1979	43 12.20N	65 43.21W	57 M.	27 M.	162	.579	.046	106
1979	43 12.20N	65 43.21W	57 M.	52 M.	162	.351	.040	107
1979	43 12.20N	65 43.21W	57 M.	27 M.	162	.579	.046	106
1979	43 12.20N	65 43.21W	57 M.	54 M.	162	.322	.031	104
1979	43 12.20N	65 43.21W	57 M.	47 M.	162	.432	.043	107
1980	43 12.50N	65 42.70W	56 M.	26 M.	199	.579	.053	106
1980	43 12.50N	65 42.70W	56 M.	53 M.	199	.368	.058	104
1980	43 12.50N	65 42.70W	56 M.	36 M.	199	.516	.051	106

SCOTIAN SHELF TIDAL CURRENT VARIABILITY

Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-43 N 65 W-							
1980	43 12.50N	65 42.70W	56 M.	51 M.	199	.390	.061	108
1980	43 12.50N	65 42.70W	56 M.	46 M.	199	.440	.064	105
1982	43 19.86N	65 38.93W	35 M.	21 M.	160	.715	.023	106
1982	43 20.04N	65 38.74W	30 M.	22 M.	160	.688	.019	103
1982	43 20.04N	65 38.74W	30 M.	25 M.	160	.617	.013	99
1982	43 20.04N	65 38.74W	30 M.	27 M.	100	.449	.019	93
1982	43 20.63N	65 36.79W	30 M.	23 M.	217	.603	.064	89
1982	43 20.63N	65 36.79W	30 M.	26 M.	217	.518	.057	90
1981	43 20.80N	65 37.00W	30 M.	15 M.	120	.641	.028	68
1981	43 20.80N	65 37.00W	33 M.	18 M.	26	.701	.034	91
1981	43 20.80N	65 37.00W	30 M.	13 M.	146	.716	.021	111
1982	43 20.83N	65 37.04W	31 M.	16 M.	217	.672	.032	97
1981	43 21.00N	65 36.70W	30 M.	25 M.	103	.565	.046	88
1981	43 21.00N	65 36.70W	33 M.	25 M.	26	.562	.045	87
1981	43 21.00N	65 36.70W	33 M.	30 M.	26	.480	.035	92
1979	43 28.79N	65 3.06W	110 M.	16 M.	162	.133	.028	46
1979	43 28.93N	65 3.30W	110 M.	100 M.	162	.114	.032	104
1979	43 28.93N	65 3.30W	110 M.	50 M.	162	.328	.104	70
1980	43 28.95N	65 3.29W	110 M.	100 M.	149	.117	.045	77
1980	43 28.95N	65 3.29W	110 M.	50 M.	149	.100	.028	65
1980	43 28.95N	65 3.35W	108 M.	13 M.	149	.142	.067	35
1979	43 29.50N	65 2.00W	113 M.	103 M.	174	.105	.041	97
1979	43 29.50N	65 2.00W	113 M.	53 M.	174	.115	.023	64
1979	43 29.52N	65 2.35W	113 M.	18 M.	174	.141	.039	36
1979	43 34.30N	65 5.80W	61 M.	51 M.	174	.094	.049	37
1979	43 34.30N	65 5.80W	61 M.	31 M.	174	.129	.026	61
1979	43 34.42N	65 6.48W	61 M.	16 M.	174	.078	.030	72
1979	43 34.65N	65 6.58W	59 M.	29 M.	166	.132	.020	73
1979	43 34.65N	65 6.58W	59 M.	29 M.	166	.132	.020	73
1979	43 34.65N	65 6.58W	59 M.	49 M.	166	.092	.034	76
1979	43 34.68N	65 6.68W	59 M.	7 M.	147	.133	.024	73
1980	43 34.78N	65 6.02W	59 M.	14 M.	145	.170	.043	69
1980	43 34.83N	65 5.88W	60 M.	30 M.	145	.118	.023	70
1980	43 34.83N	65 5.88W	60 M.	30 M.	145	.118	.023	70
1980	43 34.83N	65 5.88W	60 M.	50 M.	145	.078	.065	103
	-43 N 66 W-							
1969	43 13.70N	66 22.88W	75 M.	64 M.	25	.437	.073	140
1969	43 13.70N	66 22.88W	75 M.	63 M.	25	.081	.013	139
	-44 N 56 W-							
1975	44 1.50N	56 55.90W	2800 M.	1000 M.	115	.007	.004	3
1975	44 1.50N	56 55.90W	2800 M.	500 M.	115	.008	.004	52
1975	44 1.50N	56 55.90W	2800 M.	2001 M.	115	.004	.002	2
1975	44 1.50N	56 55.90W	2800 M.	200 M.	28	.012	.007	13
1975	44 1.90N	56 57.80W	2750 M.	1000 M.	112	.008	.005	173
1975	44 1.90N	56 57.80W	2750 M.	500 M.	112	.009	.003	105
1975	44 1.90N	56 57.80W	2750 M.	2001 M.	112	.005	.003	9
1975	44 1.90N	56 57.80W	2750 M.	200 M.	112	.013	.008	14
	-44 N 57 W-							
1975	44 35.09N	57 41.58W	52 M.	49 M.	33	.174	.134	43
1984	44 41.92N	57 53.65W	41 M.	15 M.	93	.180	.160	156
1984	44 41.92N	57 53.65W	41 M.	40 M.	69	.099	.073	145
1984	44 41.92N	57 53.65W	41 M.	15 M.	69	.050	.043	5

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Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-44 N 58 W-							
1983	44 .42N	58 50.16W	90 M.	23 M.	86	.091	.083	8
1983	44 .42N	58 50.16W	90 M.	22 M.	41	.091	.070	52
1983	44 3.60N	58 49.20W	90 M.	74 M.	40	.104	.083	53
1982	44 9.18N	58 33.24W	86 M.	20 M.	97	.148	.132	150
1982	44 9.18N	58 33.30W	86 M.	20 M.	110	.132	.126	17
1982	44 9.18N	58 34.62W	86 M.	39 M.	110	.083	.073	39
1982	44 9.18N	58 46.62W	86 M.	60 M.	109	.030	.019	55
1981	44 9.24N	58 34.68W	86 M.	38 M.	110	.115	.109	168
1981	44 9.24N	58 34.68W	86 M.	59 M.	111	.139	.139	67
1981	44 9.24N	58 39.96W	86 M.	20 M.	43	.118	.112	28
1985	44 11.65N	58 54.97W	65 M.	55 M.	31	.194	.160	16
1985	44 11.65N	58 54.97W	65 M.	38 M.	31	.183	.161	27
1985	44 11.66N	58 54.65W	65 M.	39 M.	99	.175	.149	16
1985	44 11.66N	58 54.65W	65 M.	56 M.	99	.158	.125	4
1982	44 16.20N	58 29.04W	87 M.	56 M.	119	.139	.135	53
1982	44 16.20N	58 29.34W	87 M.	20 M.	87	.119	.115	85
1982	44 16.26N	58 29.04W	87 M.	38 M.	118	.024	.008	59
1984	44 22.63N	58 1.91W	40 M.	26 M.	100	.210	.148	151
1984	44 22.63N	58 1.91W	40 M.	37 M.	100	.188	.124	151
1983	44 26.10N	58 49.26W	90 M.	87 M.	38	.094	.080	162
1983	44 26.16N	58 49.26W	90 M.	50 M.	103	.101	.096	8
1983	44 26.16N	58 49.26W	90 M.	88 M.	65	.105	.099	8
1984	44 26.29N	58 21.07W	63 M.	52 M.	66	.138	.117	2
1983	44 26.29N	58 21.07W	63 M.	20 M.	68	.159	.140	176
1983	44 26.29N	58 21.07W	63 M.	32 M.	68	.181	.160	175
1984	44 26.29N	58 21.07W	63 M.	20 M.	68	.150	.125	171
1984	44 26.29N	58 21.07W	63 M.	32 M.	66	.169	.160	1
1983	44 26.29N	58 21.07W	63 M.	55 M.	34	.152	.116	176
1984	44 26.29N	58 21.07W	63 M.	52 M.	68	.131	.106	170
1984	44 26.29N	58 21.07W	63 M.	34 M.	68	.176	.151	172
1984	44 26.29N	58 21.07W	63 M.	61 M.	66	.029	.023	108
1984	44 26.65N	58 21.13W	63 M.	20 M.	59	.153	.132	157
1984	44 26.65N	58 21.13W	63 M.	35 M.	59	.156	.137	156
1984	44 26.65N	58 21.13W	63 M.	53 M.	59	.135	.107	175
1984	44 27.41N	58 22.05W	63 M.	20 M.	41	.171	.146	162
1984	44 27.41N	58 22.05W	63 M.	37 M.	41	.131	.121	161
1984	44 27.41N	58 22.05W	63 M.	54 M.	41	.111	.087	1
1985	44 28.24N	58 58.70W	68 M.	37 M.	22	.199	.198	51
1985	44 28.24N	58 58.70W	68 M.	28 M.	22	.210	.195	66
1985	44 28.24N	58 58.70W	68 M.	57 M.	22	.176	.170	133
1982	44 45.90N	58 25.20W	90 M.	65 M.	171	.104	.084	165
1982	44 45.90N	58 25.20W	90 M.	40 M.	171	.081	.070	50
1983	44 46.44N	58 26.94W	90 M.	15 M.	34	.057	.054	150
1982	44 46.50N	58 26.88W	90 M.	13 M.	85	.076	.067	49
1983	44 47.34N	58 25.08W	90 M.	20 M.	43	.062	.061	115
1982	44 47.34N	58 27.00W	90 M.	40 M.	85	.084	.076	63
1982	44 47.34N	58 27.00W	90 M.	61 M.	50	.019	.012	178
1983	44 47.38N	58 27.20W	90 M.	64 M.	43	.088	.066	164
	-44 N 59 W-							
1984	44 .00N	59 39.77W	16 M.	14 M.	56	.075	.017	43
1985	44 .37N	59 53.27W	34 M.	8 M.	88	.041	.008	71
1985	44 .37N	59 53.27W	34 M.	33 M.	88	.028	.014	76
1985	44 .37N	59 53.27W	34 M.	15 M.	88	.041	.008	75
1984	44 .55N	59 39.77W	16 M.	14 M.	14	.108	.026	48
1985	44 .98N	59 45.86W	47 M.	8 M.	74	.075	.003	39
1985	44 .98N	59 45.86W	47 M.	8 M.	80	.076	.006	43
1983	44 1.20N	59 36.66W	21 M.	7 M.	49	.199	.100	42

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Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-44 N 59 W-							
1983	44 1.20N	59 36.66W	21 M.	20 M.	49	.126	.051	36
1984	44 1.23N	59 43.51W	40 M.	39 M.	28	.050	.010	47
1984	44 1.23N	59 43.51W	40 M.	7 M.	117	.077	.003	53
1983	44 1.32N	59 30.96W	21 M.	7 M.	69	.243	.132	34
1983	44 1.32N	59 36.66W	21 M.	7 M.	49	.220	.110	41
1983	44 1.32N	59 36.66W	21 M.	20 M.	49	.127	.051	38
1983	44 1.32N	59 52.80W	21 M.	7 M.	86	.223	.121	28
1984	44 1.38N	59 23.04W	21 M.	7 M.	28	.112	.088	128
1983	44 1.38N	59 23.10W	21 M.	20 M.	34	.161	.058	35
1983	44 1.38N	59 23.10W	21 M.	7 M.	34	.151	.043	155
1984	44 1.38N	59 23.10W	21 M.	20 M.	28	.117	.047	39
1984	44 1.38N	59 36.54W	21 M.	20 M.	41	.133	.058	33
1984	44 1.38N	59 36.54W	21 M.	7 M.	41	.144	.052	38
1983	44 1.50N	59 33.78W	21 M.	7 M.	50	.286	.126	34
1983	44 1.50N	59 33.78W	21 M.	20 M.	50	.163	.069	35
1983	44 1.56N	59 36.60W	21 M.	7 M.	45	.227	.105	60
1983	44 1.56N	59 36.60W	21 M.	20 M.	45	.121	.054	36
1984	44 1.74N	59 33.66W	21 M.	20 M.	39	.166	.068	30
1983	44 1.92N	59 33.60W	21 M.	20 M.	45	.146	.064	29
1983	44 1.92N	59 39.60W	21 M.	20 M.	57	.122	.053	30
1982	44 1.95N	59 33.95W	23 M.	22 M.	26	.080	.039	31
1983	44 1.98N	59 33.96W	21 M.	20 M.	69	.154	.053	30
1983	44 5.77N	59 27.62W	57 M.	56 M.	41	.045	.038	179
1984	44 5.93N	59 56.68W	72 M.	20 M.	85	.069	.011	11
1984	44 5.93N	59 56.68W	72 M.	60 M.	103	.062	.029	48
1984	44 5.93N	59 56.68W	72 M.	35 M.	103	.057	.011	68
1984	44 5.93N	59 56.68W	72 M.	60 M.	49	.071	.011	40
1984	44 5.93N	59 56.68W	72 M.	34 M.	49	.056	.016	69
1983	44 6.72N	59 21.36W	81 M.	43 M.	68	.109	.081	139
1983	44 6.72N	59 21.36W	81 M.	20 M.	70	.122	.086	108
1983	44 6.72N	59 21.36W	77 M.	47 M.	57	.095	.064	2
1983	44 6.72N	59 21.36W	77 M.	20 M.	28	.129	.099	112
1983	44 6.72N	59 21.36W	81 M.	61 M.	68	.018	.003	94
1983	44 6.72N	59 21.36W	77 M.	62 M.	57	.075	.052	26
1983	44 6.96N	59 21.73W	78 M.	23 M.	49	.084	.044	130
1983	44 6.96N	59 21.73W	81 M.	48 M.	49	.094	.054	136
1984	44 11.46N	59 41.44W	158 M.	126 M.	45	.066	.013	83
1984	44 11.46N	59 41.44W	158 M.	65 M.	45	.076	.017	84
1984	44 11.46N	59 41.44W	158 M.	15 M.	45	.073	.024	103
1983	44 11.64N	59 41.64W	158 M.	20 M.	48	.057	.010	73
1983	44 11.64N	59 41.64W	158 M.	79 M.	95	.050	.019	88
1984	44 11.64N	59 41.64W	158 M.	20 M.	62	.072	.022	103
1983	44 11.64N	59 41.64W	158 M.	138 M.	95	.054	.027	90
1984	44 11.64N	59 41.64W	158 M.	79 M.	62	.083	.007	80
1984	44 11.64N	59 41.64W	158 M.	138 M.	62	.073	.017	85
1983	44 11.66N	59 41.65W	158 M.	66 M.	86	.084	.028	82
1983	44 11.66N	59 41.65W	158 M.	4 M.	83	.048	.022	73
1983	44 11.66N	59 41.65W	158 M.	138 M.	86	.074	.023	85
	-44 N 60 W-							
1983	44 6.38N	60 6.95W	60 M.	60 M.	41	.031	.009	56
1985	44 6.53N	60 24.56W	62 M.	11 M.	21	.210	.123	2
1985	44 6.53N	60 24.56W	62 M.	52 M.	21	.129	.084	73
1983	44 11.29N	60 48.06W	27 M.	26 M.	41	.062	.034	75
1984	44 21.40N	60 7.80W	141 M.	32 M.	51	.071	.035	75
1984	44 22.60N	60 6.60W	141 M.	114 M.	49	.051	.031	50
1984	44 22.60N	60 6.60W	141 M.	55 M.	49	.066	.031	91

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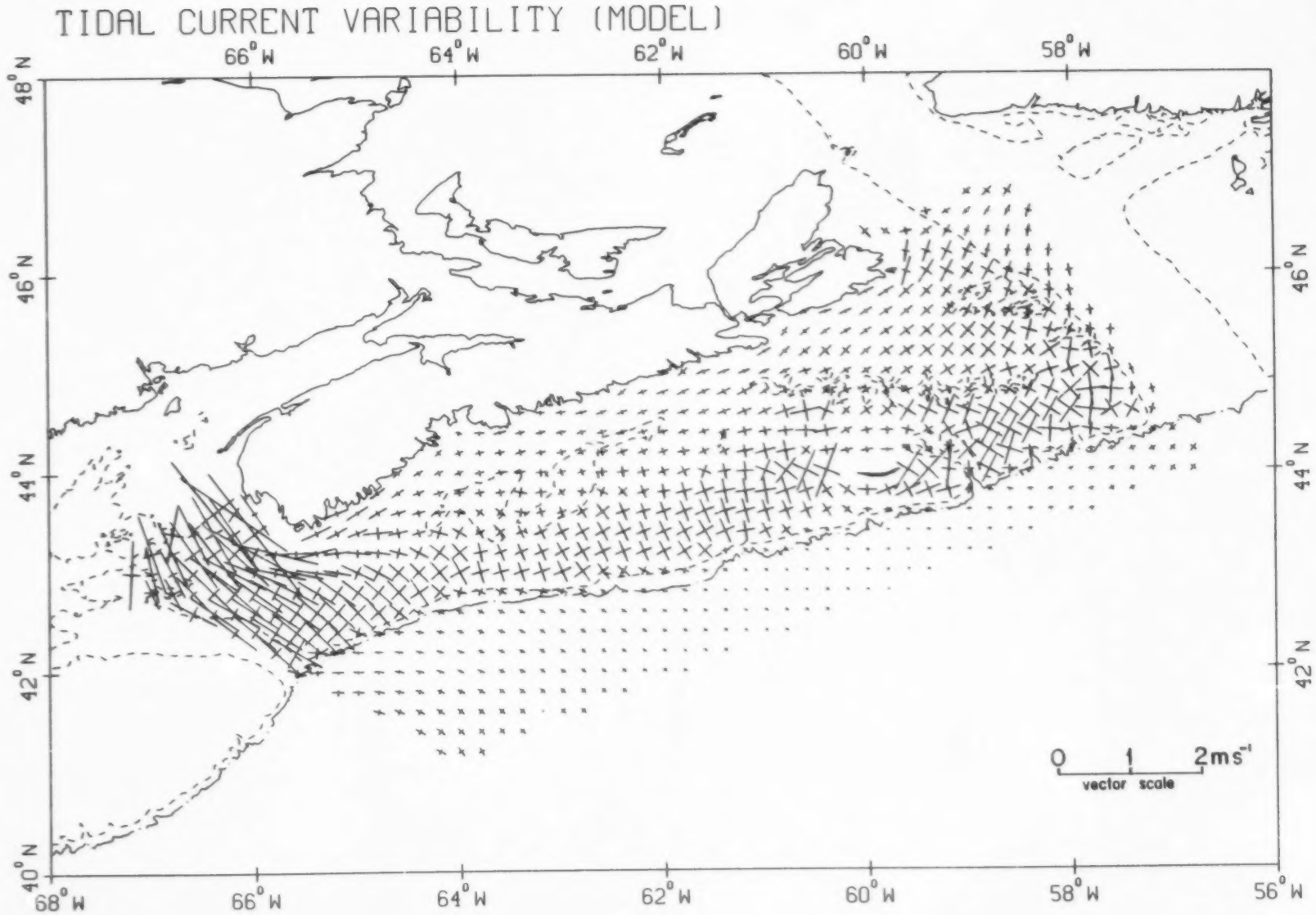
Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-44 N 61 W-							
1983	44 34.66N	61 13.44W	98 M.	97 M.	40	.032	.021	57
1985	44 35.02N	61 45.58W	155 M.	11 M.	133	.052	.019	63
1985	44 35.07N	61 45.34W	155 M.	50 M.	133	.049	.018	68
1985	44 35.07N	61 45.34W	155 M.	70 M.	133	.045	.018	67
1985	44 47.34N	61 51.41W	100 M.	11 M.	133	.054	.018	66
1985	44 47.36N	61 51.50W	101 M.	71 M.	133	.051	.015	65
1985	44 52.45N	61 55.08W	58 M.	9 M.	133	.062	.017	64
1985	44 52.49N	61 55.28W	60 M.	50 M.	133	.060	.025	53
	-44 N 62 W-							
1985	44 9.51N	62 51.47W	220 M.	110 M.	114	.037	.027	67
1985	44 9.51N	62 51.47W	220 M.	70 M.	128	.037	.021	76
1985	44 18.86N	62 56.28W	170 M.	110 M.	128	.036	.021	87
1985	44 18.86N	62 56.28W	170 M.	50 M.	128	.033	.018	76
1985	44 18.86N	62 56.28W	170 M.	70 M.	128	.031	.021	85
1985	44 18.94N	62 56.19W	175 M.	16 M.	128	.039	.018	60
1985	44 27.41N	62 59.10W	100 M.	30 M.	126	.042	.021	85
1985	44 27.41N	62 59.10W	100 M.	30 M.	126	.042	.021	85
1985	44 27.41N	62 59.10W	100 M.	70 M.	20	.032	.027	31
1985	44 27.55N	62 59.27W	108 M.	18 M.	126	.040	.018	77
1985	44 27.55N	62 59.27W	108 M.	38 M.	126	.034	.016	88
1985	44 27.55N	62 59.27W	108 M.	28 M.	126	.036	.016	92
1985	44 27.55N	62 59.27W	108 M.	23 M.	126	.039	.017	83
1985	44 31.85N	62 49.47W	95 M.	25 M.	128	.051	.024	77
1985	44 31.85N	62 49.47W	95 M.	65 M.	128	.039	.021	63
1985	44 31.94N	62 49.31W	102 M.	13 M.	119	.045	.016	77
1985	44 35.77N	62 31.38W	93 M.	4 M.	132	.046	.016	71
1985	44 35.85N	62 31.54W	102 M.	72 M.	132	.035	.015	61
1973	44 37.80N	62 59.00W	30 M.	5 M.	55	.057	.013	96
1973	44 43.10N	62 42.50W	15 M.	5 M.	34	.051	.018	94
	-44 N 63 W-							
1968	44 15.71N	63 49.51W	100 M.	95 M.	43	.044	.016	29
1968	44 15.71N	63 49.51W	95 M.	14 M.	43	.046	.030	98
1968	44 16.08N	63 49.66W	100 M.	89 M.	52	.032	.021	43
1985	44 21.57N	63 15.06W	103 M.	14 M.	127	.038	.021	81
1985	44 21.67N	63 15.06W	96 M.	66 M.	91	.039	.020	92
1985	44 21.67N	63 15.06W	96 M.	26 M.	127	.045	.025	93
1968	44 24.13N	63 30.14W	70 M.	10 M.	70	.097	.019	77
1968	44 24.13N	63 30.15W	100 M.	92 M.	31	.065	.010	172
1968	44 24.50N	63 30.30W	70 M.	14 M.	59	.070	.014	68
1968	44 24.50N	63 30.30W	100 M.	98 M.	87	.045	.013	148
1968	44 24.50N	63 30.30W	100 M.	95 M.	25	.027	.012	59
1968	44 24.69N	63 30.28W	70 M.	14 M.	44	.069	.020	57
1968	44 24.69N	63 30.28W	100 M.	95 M.	44	.053	.011	159
1969	44 28.30N	63 22.90W	70 M.	30 M.	42	.019	.011	59
1969	44 28.30N	63 22.90W	90 M.	30 M.	42	.019	.011	59
1969	44 28.30N	63 22.90W	70 M.	10 M.	46	.034	.021	75
1969	44 28.30N	63 22.90W	70 M.	20 M.	41	.011	.005	5
1971	44 29.35N	63 23.32W	90 M.	42 M.	76	.040	.029	82
1971	44 29.35N	63 23.32W	70 M.	29 M.	76	.046	.025	87
1971	44 29.35N	63 23.32W	70 M.	16 M.	76	.040	.023	63
1972	44 29.70N	63 26.35W	95 M.	32 M.	36	.046	.028	91
1972	44 29.70N	63 26.35W	95 M.	47 M.	56	.028	.021	88
1971	44 31.75N	63 27.10W	30 M.	8 M.	21	.021	.010	127
1971	44 31.75N	63 27.10W	30 M.	14 M.	21	.025	.013	147
1971	44 31.75N	63 27.10W	30 M.	24 M.	21	.031	.023	128

SCOTIAN SHELF TIDAL CURRENT VARIABILITY

Year	Latitude	Longitude	Water Depth M.	Mooring Depth M.	Length Days	Current Variability Major m/s	Minor m/s	Dir Deg T
	-44 N 63 W-							
1971	44 31.75N	63 27.10W	30 M.	3 M.	21	.022	.006	96
1985	44 32.91N	63 3.55W	61 M.	12 M.	127	.037	.019	92
1985	44 33.04N	63 3.62W	55 M.	45 M.	26	.028	.023	73
1985	44 33.04N	63 3.62W	55 M.	25 M.	127	.050	.034	88
1986	44 37.45N	63 7.21W	37 M.	36 M.	26	.008	.006	37
1986	44 38.33N	63 7.24W	30 M.	29 M.	153	.011	.008	101
1986	44 39.33N	63 7.18W	20 M.	19 M.	117	.006	.004	140
	-45 N 61 W-							
1983	45 1.79N	61 31.75W	59 M.	58 M.	41	.022	.005	131
	-47 N 59 W-							
1966	47 14.60N	59 59.80W	400 M.	9 M.	29	.101	.045	132
1966	47 14.60N	59 59.80W	400 M.	72 M.	29	.122	.032	139
1966	47 19.50N	59 50.90W	450 M.	13 M.	29	.127	.035	132
1966	47 19.50N	59 50.90W	450 M.	325 M.	29	.102	.019	141
1966	47 19.50N	59 50.90W	450 M.	75 M.	29	.117	.016	132
1966	47 24.40N	59 42.00W	480 M.	13 M.	29	.196	.086	128
1966	47 24.40N	59 42.00W	480 M.	325 M.	29	.090	.007	139
1966	47 24.40N	59 42.00W	480 M.	75 M.	29	.133	.011	139
1966	47 34.10N	59 24.30W	400 M.	13 M.	29	.115	.055	34
1966	47 34.10N	59 24.30W	400 M.	330 M.	29	.150	.036	135
1966	47 34.10N	59 24.30W	400 M.	65 M.	26	.144	.015	142
1980	47 44.61N	59 37.32W	348 M.	250 M.	143	.112	.011	156
1978	47 44.83N	59 35.77W	400 M.	300 M.	179	.099	.006	162
1979	47 44.87N	59 35.96W	500 M.	300 M.	170	.088	.012	159
1980	47 44.87N	59 35.96W	355 M.	250 M.	206	.095	.010	154
	-47 N 60 W-							
1967	47 4.50N	60 17.20W	160 M.	72 M.	43	.158	.012	112
1967	47 4.60N	60 17.40W	160 M.	17 M.	86	.149	.058	145
1967	47 4.60N	60 17.40W	160 M.	72 M.	32	.170	.017	110
1966	47 4.90N	60 17.60W	160 M.	13 M.	30	.168	.091	142
1966	47 4.90N	60 17.60W	160 M.	75 M.	30	.151	.023	111
1983	47 10.99N	60 14.90W	174 M.	173 M.	84	.127	.051	134


TIDAL CURRENT VARIABILITY (MODEL)
66°W
64°W
62°W
60°W
58°W
48°N
46°N
44°N
42°N
40°N
68°W
56°W
0 1 2ms⁻¹
vector scale

SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-41 N 62 W-					
41 36N	62 48W	3550	.020	.012	132
41 48N	62 36W	3250	.020	.010	132
41 48N	62 24W	3500	.017	.007	125
41 48N	62 48W	3200	.021	.011	128
-41 N 63 W-					
41 12N	63 48W	3900	.043	.026	153
41 24N	63 36W	3700	.034	.022	140
41 36N	63 0W	3500	.024	.014	133
41 36N	63 36W	3250	.033	.018	129
41 48N	63 0W	3150	.023	.012	127
41 48N	63 24W	3000	.028	.013	124
41 48N	63 48W	2900	.034	.013	119
41 24N	63 24W	3750	.030	.017	133
41 24N	63 48W	3550	.039	.024	138
41 36N	63 24W	3350	.029	.017	131
41 36N	63 48W	3200	.036	.018	127
41 48N	63 12W	3100	.025	.012	126
41 48N	63 36W	2950	.030	.013	123
-41 N 64 W-					
41 12N	64 0W	3800	.059	.024	146
41 24N	64 0W	3450	.045	.024	134
41 24N	64 24W	3200	.061	.023	116
41 36N	64 12W	3025	.045	.019	119
41 36N	64 36W	2825	.057	.021	109
41 48N	64 0W	2825	.037	.013	115
41 48N	64 24W	2700	.044	.012	108
41 48N	64 48W	2475	.055	.014	99
41 12N	64 12W	3700	.058	.021	115
41 24N	64 12W	3350	.053	.024	127
41 36N	64 0W	3100	.040	.019	123
41 36N	64 24W	2950	.050	.019	114
41 36N	64 48W	2700	.066	.020	105
41 48N	64 12W	2800	.040	.012	112
41 48N	64 36W	2575	.049	.013	102
-41 N 65 W-					
41 48N	65 0W	2325	.060	.017	93
41 48N	65 12W	2100	.069	.024	91
-42 N 59 W-					
42 48N	59 48W	3600	.005	.003	99
-42 N 60 W-					
42 24N	60 48W	3600	.007	.004	133
42 36N	60 36W	3450	.007	.004	139
42 48N	60 0W	3250	.005	.004	120
42 48N	60 24W	3125	.006	.004	128
42 48N	60 48W	3100	.007	.003	132
42 36N	60 24W	3700	.006	.003	128
42 36N	60 48W	3200	.007	.004	133
42 48N	60 12W	2825	.006	.004	127
42 48N	60 36W	3250	.007	.003	126
-42 N 61 W-					
42 0N	61 48W	3800	.012	.004	130
42 12N	61 36W	3500	.011	.003	130
42 24N	61 0W	3575	.008	.004	138
42 24N	61 24W	3200	.009	.003	127
42 24N	61 48W	2750	.013	.003	122
42 12N	61 24W	3625	.010	.002	128
42 12N	61 48W	3525	.012	.003	127
42 24N	61 12W	3525	.008	.003	135
42 24N	61 36W	2825	.011	.003	124
42 36N	61 0W	3100	.008	.003	126

SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-42 N 61 W-					
42 36N	61 12W	2800	.008	.003	128
42 36N	61 36W	2300	.012	.003	121
42 48N	61 0W	2725	.008	.003	127
42 48N	61 24W	1800	.010	.004	119
42 48N	61 48W	1125	.018	.005	115
42 36N	61 24W	2475	.010	.003	125
42 36N	61 48W	2000	.014	.004	118
42 48N	61 12W	2250	.009	.003	128
42 48N	61 36W	1350	.013	.004	114
-42 N 62 W-					
42 0N	62 0W	3575	.014	.005	128
42 0N	62 24W	3150	.018	.007	126
42 0N	62 48W	3000	.021	.008	122
42 12N	62 12W	2800	.016	.005	124
42 12N	62 36W	2600	.019	.006	120
42 24N	62 0W	2525	.014	.004	120
42 24N	62 24W	2125	.019	.005	119
42 24N	62 48W	2000	.022	.006	120
42 36N	62 12W	1600	.019	.005	119
42 36N	62 36W	1600	.023	.004	120
42 48N	62 0W	1025	.022	.007	120
42 48N	62 24W	975	.026	.006	119
42 48N	62 48W	800	.044	.012	116
42 0N	62 12W	3350	.015	.006	129
42 0N	62 36W	3100	.020	.008	125
42 12N	62 0W	3200	.013	.004	122
42 12N	62 24W	2700	.017	.006	121
42 12N	62 48W	2500	.021	.006	121
42 24N	62 12W	2250	.017	.005	121
42 24N	62 36W	2000	.021	.006	120
42 36N	62 0W	1750	.017	.004	119
42 36N	62 24W	1475	.022	.005	121
42 36N	62 48W	1575	.024	.005	121
42 48N	62 12W	950	.026	.007	120
42 48N	62 36W	600	.026	.005	114
-42 N 63 W-					
42 0N	63 0W	2825	.022	.009	121
42 0N	63 24W	2675	.026	.009	118
42 0N	63 48W	2600	.032	.009	113
42 12N	63 12W	2325	.024	.007	118
42 12N	63 36W	2200	.028	.007	112
42 24N	63 0W	2000	.023	.006	120
42 24N	63 24W	1850	.026	.007	115
42 24N	63 48W	1750	.030	.007	110
42 36N	63 12W	1520	.026	.006	120
42 36N	63 36W	1270	.031	.009	117
42 48N	63 0W	500	.047	.022	111
42 48N	63 24W	300	.062	.038	111
42 48N	63 48W	300	.058	.034	116
42 0N	63 12W	2750	.024	.009	121
42 0N	63 36W	2650	.029	.009	117
42 12N	63 0W	2450	.022	.006	121
42 12N	63 24W	2250	.026	.007	116
42 12N	63 48W	2100	.030	.007	110
42 24N	63 12W	1920	.024	.005	118
42 24N	63 36W	1730	.028	.007	112
42 36N	63 0W	1675	.026	.005	122
42 36N	63 24W	1400	.029	.008	118
42 36N	63 48W	1150	.031	.010	116
42 48N	63 12W	300	.059	.033	106
42 48N	63 36W	300	.060	.037	114
-42 N 64 W-					
42 0N	64 0W	2250	.033	.009	109
42 0N	64 24W	2300	.041	.007	103
42 0N	64 48W	2000	.050	.006	95
42 12N	64 12W	1975	.037	.006	104
42 12N	64 36W	1900	.043	.006	96
42 24N	64 0W	1600	.031	.009	106
42 24N	64 24W	1600	.036	.011	98
42 0N	64 12W	2350	.039	.008	106
42 0N	64 36W	2300	.046	.006	100
42 12N	64 0W	1950	.033	.007	107
42 12N	64 24W	1975	.038	.006	100
42 12N	64 48W	1725	.048	.006	91
42 24N	64 12W	1575	.035	.010	102
42 24N	64 36W	1300	.043	.013	92

SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-42 N 64 W-					
42 24N	64 48W	600	.052	.011	97
42 36N	64 12W	1125	.039	.014	111
42 36N	64 36W	127	.143	.083	129
42 48N	64 0W	155	.076	.054	107
42 48N	64 24W	110	.199	.127	146
42 48N	64 48W	102	.226	.110	130
-42 N 65 W-					
42 0N	65 0W	2000	.056	.007	93
42 0N	65 24W	1440	.072	.019	267
42 12N	65 0W	1400	.060	.008	91
42 12N	65 24W	180	.119	.062	95
42 12N	65 48W	230	.339	.084	133
42 24N	65 12W	118	.304	.167	137
42 24N	65 36W	94	.405	.212	129
42 36N	65 0W	112	.270	.135	136
42 36N	65 24W	94	.342	.157	130
42 36N	65 48W	88	.384	.136	123
42 48N	65 12W	110	.298	.111	126
42 48N	65 36W	120	.328	.077	117
-42 N 66 W-					
42 24N	66 0W	230	.344	.063	129
42 36N	66 0W	85	.356	.106	123
42 36N	66 24W	127	.381	.059	125
42 48N	66 0W	72	.441	.114	125
42 48N	66 24W	90	.438	.094	134
42 48N	66 48W	210	.233	.087	153
-42 N 67 W-					
42 48N	67 0W	190	.206	.068	155
-43 N 57 W-					
43 36N	57 48W	3500	.015	.008	257
43 48N	57 36W	3000	.018	.011	242
-43 N 58 W-					
43 12N	58 48W	2900	.009	.003	257
43 24N	58 36W	3200	.010	.002	259
43 36N	58 0W	3400	.014	.005	248
43 36N	58 24W	2850	.014	.001	264
43 36N	58 48W	2500	.013	.001	91
42 36N	64 0W	1075	.034	.012	115
42 36N	64 24W	500	.043	.020	105
42 36N	64 48W	117	.232	.128	140
42 48N	64 12W	125	.131	.095	131
42 48N	64 36W	105	.206	.121	136
42 0N	65 12W	1700	.062	.009	91
42 0N	65 36W	450	.114	.033	105
42 12N	65 12W	900	.078	.010	95
42 12N	65 36W	116	.389	.216	120
42 24N	65 0W	135	.112	.055	112
42 24N	65 24W	106	.361	.209	136
42 24N	65 48W	130	.403	.156	123
42 36N	65 12W	102	.304	.145	132
42 36N	65 36W	90	.374	.154	126
42 48N	65 0W	98	.256	.111	128
42 48N	65 24W	115	.281	.082	121
42 48N	65 48W	105	.385	.083	118
42 24N	66 12W	245	.358	.055	128
42 36N	66 12W	70	.373	.078	119
42 36N	66 36W	170	.342	.094	117
42 48N	66 12W	45	.514	.149	131
42 48N	66 36W	150	.318	.043	137
43 48N	57 24W	3200	.020	.015	245
43 48N	57 48W	2600	.018	.007	252
43 24N	58 24W	3300	.011	.003	259
43 24N	58 48W	2900	.010	.002	259
43 36N	58 12W	2900	.014	.003	256
43 36N	58 36W	2700	.014	.002	269
43 48N	58 0W	2400	.015	.003	251

SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-43 N 58 W-					
43 48N	58 12W	2700	.014	.003	254
43 48N	58 36W	2000	.024	.006	98
43 48N	58 24W	2000	.021	.006	264
43 48N	58 48W	1400	.028	.009	110
-43 N 59 W-					
43 0N	59 24W	3300	.006	.003	258
43 0N	59 48W	3000	.005	.004	94
43 12N	59 12W	2700	.008	.003	257
43 12N	59 36W	2800	.006	.003	269
43 24N	59 0W	2300	.011	.001	263
43 24N	59 24W	2300	.009	.001	94
43 24N	59 48W	1800	.007	.002	101
43 36N	59 12W	1000	.021	.003	93
43 36N	59 36W	600	.023	.009	92
43 48N	59 0W	500	.048	.014	10
43 48N	59 24W	70	.169	.109	249
43 48N	59 48W	50	.149	.071	248
43 0N	59 36W	3000	.005	.003	262
43 12N	59 0W	2800	.009	.003	253
43 12N	59 24W	2800	.006	.002	261
43 12N	59 48W	2300	.005	.003	94
43 24N	59 12W	2400	.010	.001	269
43 24N	59 36W	2000	.008	.002	100
43 36N	59 0W	1400	.014	.003	264
43 36N	59 24W	800	.025	.007	102
43 36N	59 48W	160	.037	.017	262
43 48N	59 12W	85	.159	.110	256
43 48N	59 36W	55	.176	.106	243
-43 N 60 W-					
43 0N	60 0W	2500	.005	.003	109
43 0N	60 24W	2350	.006	.003	125
43 0N	60 48W	2100	.008	.003	129
43 12N	60 12W	1500	.008	.003	115
43 12N	60 36W	1400	.009	.003	122
43 24N	60 0W	1100	.008	.003	107
43 24N	60 24W	400	.015	.006	119
43 24N	60 48W	100	.077	.060	143
43 36N	60 12W	80	.064	.035	130
43 36N	60 36W	70	.113	.072	157
43 48N	60 0W	45	.120	.062	91
43 48N	60 24W	60	.124	.061	146
43 48N	60 48W	40	.178	.131	162
43 0N	60 12W	2450	.006	.003	120
43 0N	60 36W	2350	.007	.003	128
43 12N	60 0W	1800	.006	.003	101
43 12N	60 24W	1900	.008	.003	126
43 12N	60 48W	1400	.012	.004	118
43 24N	60 12W	220	.013	.004	100
43 24N	60 36W	160	.028	.019	104
43 36N	60 0W	115	.041	.019	91
43 36N	60 24W	70	.089	.054	147
43 36N	60 48W	60	.128	.090	159
43 48N	60 12W	50	.121	.054	125
43 48N	60 36W	45	.137	.092	161
-43 N 61 W-					
43 0N	61 0W	1800	.010	.004	131
43 0N	61 24W	1400	.011	.004	123
43 0N	61 48W	225	.045	.025	106
43 12N	61 12W	700	.019	.009	132
43 12N	61 36W	80	.128	.099	138
43 24N	61 0W	90	.100	.084	153
43 24N	61 24W	70	.162	.120	156
43 24N	61 48W	80	.145	.108	152
43 36N	61 12W	55	.158	.121	165
43 36N	61 36W	65	.161	.126	157
43 48N	61 0W	45	.169	.133	171
43 0N	61 12W	1900	.010	.004	132
43 0N	61 36W	450	.020	.010	102
43 12N	61 0W	550	.019	.010	117
43 12N	61 24W	120	.029	.024	259
43 12N	61 48W	90	.141	.101	147
43 24N	61 12W	75	.128	.106	171
43 24N	61 36W	70	.156	.118	150
43 36N	61 0W	60	.142	.105	162
43 36N	61 24W	55	.169	.133	162
43 36N	61 48W	75	.138	.107	158
43 48N	61 12W	55	.156	.120	171

SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-43 N 61 W-					
43 48N	61 24W	55	.152	.128	169
43 48N	61 36W	60	.139	.123	161
43 48N	61 48W	80	.111	.097	166
-43 N 62 W-					
43 0N	62 0W	140	.065	.040	107
43 0N	62 12W	135	.073	.049	117
43 0N	62 24W	140	.089	.063	129
43 0N	62 36W	115	.117	.074	144
43 0N	62 48W	120	.148	.114	145
43 12N	62 0W	96	.134	.098	154
43 12N	62 12W	100	.131	.098	158
43 12N	62 24W	97	.136	.101	158
43 12N	62 36W	98	.140	.104	155
43 12N	62 48W	104	.137	.106	151
43 24N	62 0W	90	.132	.099	156
43 24N	62 12W	100	.120	.089	159
43 24N	62 24W	85	.125	.099	155
43 24N	62 36W	94	.127	.097	152
43 24N	62 48W	98	.121	.092	152
43 36N	62 0W	90	.121	.093	160
43 36N	62 12W	95	.103	.080	164
43 36N	62 24W	76	.111	.086	158
43 36N	62 36W	85	.116	.096	143
43 36N	62 48W	150	.088	.064	148
43 48N	62 0W	115	.085	.071	172
43 48N	62 12W	128	.072	.066	159
43 48N	62 24W	135	.067	.057	138
43 48N	62 36W	160	.064	.049	115
43 48N	62 48W	220	.045	.038	99
-43 N 63 W-					
43 0N	63 0W	128	.143	.115	156
43 0N	63 12W	155	.128	.102	161
43 0N	63 24W	155	.119	.095	162
43 0N	63 36W	146	.120	.094	165
43 0N	63 48W	125	.138	.108	165
43 12N	63 0W	122	.123	.096	151
43 12N	63 12W	140	.111	.084	156
43 12N	63 24W	140	.106	.081	158
43 12N	63 36W	165	.105	.072	159
43 12N	63 48W	124	.113	.081	169
43 24N	63 0W	105	.109	.085	154
43 24N	63 12W	195	.087	.063	154
43 24N	63 24W	172	.072	.055	158
43 24N	63 36W	185	.073	.054	141
43 24N	63 48W	210	.074	.049	154
43 36N	63 0W	235	.056	.047	158
43 36N	63 12W	225	.046	.043	256
43 36N	63 24W	115	.062	.046	97
43 36N	63 36W	212	.063	.043	127
43 36N	63 48W	235	.052	.040	125
43 48N	63 0W	265	.040	.034	234
43 48N	63 12W	105	.061	.044	266
43 48N	63 24W	135	.073	.050	101
43 48N	63 36W	235	.045	.033	263
43 48N	63 48W	230	.045	.028	259
-43 N 64 W-					
43 0N	64 0W	95	.171	.138	152
43 0N	64 12W	96	.172	.130	140
43 0N	64 24W	124	.162	.095	136
43 0N	64 36W	95	.168	.097	132
43 0N	64 48W	75	.215	.107	119
43 12N	64 0W	88	.143	.118	140
43 12N	64 12W	84	.150	.113	128
43 12N	64 24W	125	.130	.078	118
43 12N	64 36W	130	.111	.054	106
43 12N	64 48W	145	.156	.043	97
43 24N	64 0W	105	.097	.082	120
43 24N	64 12W	117	.108	.066	106
43 24N	64 24W	160	.073	.036	254
43 24N	64 36W	80	.117	.053	256
43 24N	64 48W	75	.189	.071	265
43 36N	64 0W	180	.060	.041	100
43 36N	64 12W	205	.064	.027	259
43 36N	64 24W	155	.071	.028	256
43 36N	64 36W	145	.093	.026	254
43 36N	64 48W	105	.126	.029	240

SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-43 N 64 W-					
43 48N	64 0W	205	.049	.024	260
43 48N	64 12W	165	.055	.022	254
43 48N	64 24W	140	.063	.020	248
43 48N	64 36W	80	.079	.016	237
43 48N	64 48W	30	.107	.009	235
-43 N 65 W-					
43 0N	65 0W	135	.231	.080	116
43 0N	65 12W	165	.179	.034	100
43 0N	65 24W	130	.242	.032	98
43 0N	65 36W	120	.363	.043	102
43 0N	65 48W	125	.406	.028	102
43 12N	65 0W	165	.160	.037	94
43 12N	65 12W	154	.158	.043	263
43 12N	65 24W	90	.256	.024	256
43 12N	65 36W	60	.405	.033	268
43 12N	65 48W	52	.592	.037	104
43 24N	65 0W	160	.127	.028	248
43 24N	65 12W	110	.143	.032	242
43 24N	65 24W	53	.210	.026	245
43 36N	65 0W	50	.158	.011	238
43 36N	65 12W	40	.145	.017	249
-43 N 66 W-					
43 0N	66 0W	130	.450	.033	112
43 0N	66 12W	130	.463	.036	117
43 0N	66 24W	110	.391	.046	126
43 0N	66 36W	120	.335	.065	134
43 0N	66 48W	150	.339	.047	153
43 12N	66 0W	65	.698	.089	119
43 12N	66 12W	85	.621	.088	133
43 12N	66 24W	80	.542	.093	143
43 12N	66 36W	110	.545	.128	145
43 12N	66 48W	145	.445	.088	156
43 24N	66 0W	60	1.042	.181	143
43 24N	66 12W	75	.574	.079	146
43 24N	66 24W	65	.583	.114	151
43 24N	66 36W	100	.451	.062	154
43 24N	66 48W	180	.376	.134	11
43 36N	66 0W	20	.332	.026	146
43 36N	66 12W	45	.874	.108	125
43 36N	66 24W	80	.913	.341	142
-43 N 67 W-					
43 0N	67 0W	200	.377	.062	168
43 0N	67 12W	205	.460	.103	3
43 12N	67 0W	180	.546	.109	161
-44 N 56 W-					
44 0N	56 48W	2700	.037	.027	36
44 12N	56 48W	2100	.044	.033	35
-44 N 57 W-					
44 0N	57 0W	2700	.032	.028	37
44 0N	57 12W	2600	.028	.020	246
44 0N	57 24W	2700	.022	.013	244
44 0N	57 36W	2350	.020	.009	252
44 0N	57 48W	2000	.019	.006	256
44 12N	57 0W	2250	.036	.023	42
44 12N	57 12W	1900	.034	.019	243
44 12N	57 24W	1650	.030	.013	248
44 12N	57 36W	1150	.030	.009	256
44 12N	57 48W	600	.030	.010	264
44 24N	57 0W	1600	.043	.020	232
44 24N	57 12W	700	.038	.015	232
44 24N	57 24W	250	.056	.020	254
44 24N	57 36W	100	.085	.032	93
44 24N	57 48W	90	.107	.071	99
44 36N	57 12W	300	.058	.026	13
44 36N	57 24W	64	.130	.102	30
44 36N	57 36W	60	.156	.136	237

SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-44 N 57 W-					
44 36N	57 48W	36	.207	.199	6
44 48N	57 24W	65	.069	.017	179
44 48N	57 48W	44	.209	.192	173
-44 N 58 W-					
44 0N	58 0W	2250	.016	.004	251
44 0N	58 24W	1000	.021	.005	96
44 0N	58 48W	120	.188	.167	28
44 12N	58 12W	180	.035	.014	93
44 12N	58 36W	80	.213	.173	17
44 24N	58 0W	60	.109	.075	256
44 24N	58 24W	65	.204	.171	27
44 24N	58 48W	70	.211	.189	29
44 36N	58 12W	65	.181	.147	30
44 36N	58 36W	70	.186	.144	33
44 48N	58 0W	45	.188	.167	229
44 48N	58 24W	100	.108	.089	27
44 48N	58 48W	200	.066	.050	39
-44 N 59 W-					
44 0N	59 0W	1000	.116	.049	179
44 0N	59 24W	35	.304	.176	43
44 12N	59 0W	100	.182	.124	227
44 12N	59 24W	180	.075	.028	140
44 12N	59 48W	160	.071	.014	91
44 24N	59 12W	130	.099	.087	240
44 24N	59 36W	140	.073	.052	104
44 36N	59 0W	60	.209	.165	20
44 36N	59 24W	60	.178	.128	25
44 36N	59 48W	100	.098	.070	229
44 48N	59 12W	240	.058	.047	247
44 48N	59 36W	200	.063	.046	251
-44 N 60 W-					
44 0N	60 24W	15	.384	.181	22
44 0N	60 48W	35	.205	.180	38
44 12N	60 12W	160	.065	.029	258
44 12N	60 36W	100	.070	.061	40
44 24N	60 0W	140	.062	.034	260
44 24N	60 24W	50	.148	.067	259
44 24N	60 48W	55	.090	.056	263
44 36N	60 12W	220	.060	.038	44
44 36N	60 36W	40	.198	.134	258
44 48N	60 0W	240	.054	.027	239

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
44 48N	57 12W	420	.047	.019	167
44 48N	57 36W	36	.176	.149	4
44 0N	58 12W	1800	.019	.008	263
44 0N	58 36W	200	.086	.050	91
44 12N	58 0W	800	.021	.008	255
44 12N	58 24W	220	.085	.039	265
44 12N	58 48W	70	.254	.218	32
44 24N	58 12W	60	.175	.164	3
44 24N	58 36W	70	.214	.175	28
44 36N	58 0W	49	.224	.197	36
44 36N	58 24W	55	.192	.155	38
44 36N	58 48W	70	.189	.139	25
44 48N	58 12W	80	.142	.112	25
44 48N	58 36W	220	.070	.056	37
44 0N	59 12W	55	.240	.090	6
44 0N	59 36W	20	.312	.162	33
44 12N	59 12W	160	.089	.029	169
44 12N	59 36W	180	.075	.016	127
44 24N	59 0W	80	.182	.138	251
44 24N	59 24W	180	.066	.059	149
44 24N	59 48W	130	.069	.041	269
44 36N	59 12W	60	.196	.140	23
44 36N	59 36W	50	.152	.122	33
44 48N	59 0W	250	.052	.041	228
44 48N	59 24W	250	.057	.041	240
44 48N	59 48W	200	.057	.031	241
44 0N	60 36W	20	.293	.180	25
44 12N	60 0W	140	.067	.018	261
44 12N	60 24W	100	.074	.048	261
44 12N	60 48W	40	.132	.114	169
44 24N	60 12W	130	.070	.034	239
44 24N	60 36W	50	.128	.073	91
44 36N	60 0W	100	.085	.052	236
44 36N	60 24W	55	.130	.094	22
44 36N	60 48W	40	.132	.086	251
44 48N	60 12W	160	.063	.027	247

SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-44 N 60 W-					
44 48N	60 24W	120	.047	.033	40
44 48N	60 48W	140	.060	.015	251
-44 N 61 W-					
44 0N	61 0W	50	.141	.126	23
44 0N	61 24W	100	.093	.076	170
44 0N	61 48W	120	.070	.058	246
44 12N	61 12W	80	.102	.071	260
44 12N	61 36W	140	.057	.036	245
44 24N	61 0W	120	.071	.049	259
44 24N	61 24W	160	.060	.024	250
44 24N	61 48W	170	.057	.023	253
44 36N	61 12W	110	.084	.036	248
44 36N	61 36W	155	.062	.017	247
44 48N	61 0W	200	.059	.013	238
44 48N	61 24W	100	.086	.026	244
44 48N	61 48W	110	.071	.012	244
-44 N 62 W-					
44 0N	62 0W	130	.061	.051	250
44 0N	62 24W	100	.067	.055	262
44 0N	62 48W	245	.040	.030	253
44 12N	62 12W	175	.054	.031	247
44 12N	62 36W	170	.056	.029	259
44 24N	62 0W	190	.053	.020	255
44 24N	62 24W	190	.052	.015	252
44 24N	62 48W	160	.050	.016	252
44 36N	62 12W	150	.052	.014	250
44 36N	62 36W	100	.054	.012	250
44 48N	62 0W	90	.065	.009	250
44 48N	62 24W	20	.054	.011	232
-44 N 63 W-					
44 0N	63 0W	225	.039	.028	253
44 0N	63 24W	195	.054	.025	259
44 0N	63 48W	180	.044	.025	257
44 12N	63 12W	160	.048	.021	259
44 12N	63 36W	140	.050	.021	261
44 24N	63 0W	160	.046	.017	259
44 24N	63 24W	100	.049	.018	260
44 24N	63 48W	65	.049	.011	92
44 36N	63 12W	40	.045	.015	270

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
44 48N	60 36W	220	.063	.023	265
44 0N	61 12W	65	.112	.105	178
44 0N	61 36W	90	.084	.077	21
44 12N	61 0W	60	.128	.100	256
44 12N	61 24W	140	.060	.043	247
44 12N	61 48W	120	.064	.041	260
44 24N	61 12W	100	.084	.051	257
44 24N	61 36W	170	.055	.023	250
44 36N	61 0W	120	.085	.037	244
44 36N	61 24W	130	.076	.025	249
44 36N	61 48W	155	.060	.015	249
44 48N	61 12W	100	.093	.036	243
44 48N	61 36W	110	.074	.015	246
44 0N	62 12W	120	.060	.051	255
44 0N	62 36W	170	.056	.040	267
44 12N	62 0W	160	.051	.035	254
44 12N	62 24W	120	.059	.033	251
44 12N	62 48W	230	.042	.021	246
44 24N	62 12W	225	.049	.017	251
44 24N	62 36W	180	.050	.015	252
44 36N	62 0W	155	.058	.013	248
44 36N	62 24W	130	.054	.012	251
44 36N	62 48W	60	.062	.010	257
44 48N	62 12W	60	.052	.011	250
44 0N	63 12W	135	.054	.036	265
44 0N	63 36W	185	.046	.022	253
44 12N	63 0W	190	.044	.022	259
44 12N	63 24W	120	.055	.022	254
44 12N	63 48W	120	.042	.021	257
44 24N	63 12W	100	.048	.014	258
44 24N	63 36W	80	.071	.008	257
44 36N	63 0W	50	.048	.014	261
44 36N	63 24W	20	.037	.014	267

SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

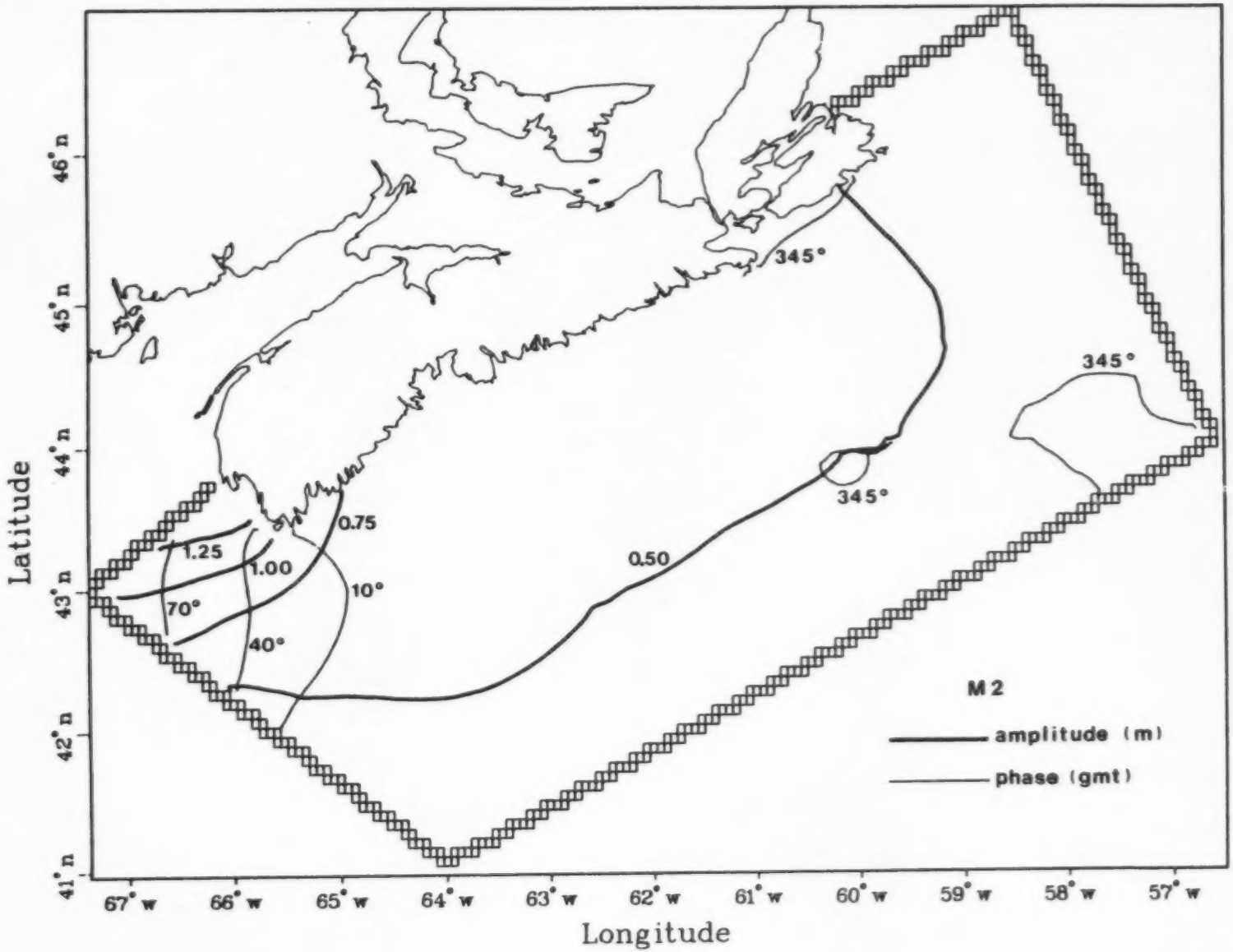
Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-44 N 64 W-					
44 0N	64 0W	155	.045	.022	251
44 0N	64 24W	68	.054	.015	240
44 12N	64 0W	100	.039	.021	253
44 24N	64 0W	60	.031	.017	106
-45 N 57 W-					
45 0N	57 24W	390	.061	.010	159
45 0N	57 48W	135	.139	.125	134
45 12N	57 48W	95	.104	.081	169
45 24N	57 48W	170	.079	.042	1
-45 N 58 W-					
45 0N	58 0W	125	.115	.101	249
45 0N	58 24W	140	.085	.066	235
45 0N	58 48W	125	.096	.071	242
45 12N	58 12W	100	.152	.130	237
45 12N	58 36W	100	.121	.102	33
45 24N	58 0W	125	.074	.060	21
45 24N	58 24W	80	.127	.099	15
45 24N	58 48W	100	.132	.101	39
45 36N	58 12W	110	.116	.094	35
45 36N	58 36W	250	.085	.054	34
45 48N	58 0W	380	.063	.031	170
45 48N	58 24W	200	.094	.069	39
45 48N	58 48W	255	.071	.035	32
-45 N 59 W-					
45 0N	59 0W	110	.096	.064	237
45 0N	59 24W	90	.082	.054	229
45 0N	59 48W	140	.069	.038	241
45 12N	59 12W	100	.113	.081	39
45 12N	59 36W	100	.105	.062	234
45 24N	59 0W	95	.136	.096	42
45 24N	59 24W	100	.110	.064	229
45 24N	59 48W	115	.085	.032	236
45 36N	59 12W	140	.095	.051	39
45 36N	59 36W	160	.086	.025	230
45 48N	59 0W	210	.077	.034	36
45 48N	59 24W	130	.099	.042	44
45 48N	59 48W	90	.112	.011	238
-45 N 60 W-					
45 0N	60 0W	155	.061	.027	237
45 0N	60 12W	157	.063	.025	239
44 0N	64 12W	100	.048	.019	246
44 0N	64 36W	50	.055	.013	228
44 12N	64 12W	80	.039	.017	226
45 0N	57 36W	45	.152	.077	169
45 12N	57 36W	300	.061	.028	165
45 24N	57 36W	435	.060	.033	179
45 36N	57 48W	400	.056	.030	173
45 0N	58 12W	150	.111	.097	252
45 0N	58 36W	150	.106	.083	252
45 12N	58 0W	68	.145	.108	9
45 12N	58 24W	140	.097	.075	231
45 12N	58 48W	90	.134	.108	42
45 24N	58 12W	125	.090	.069	16
45 24N	58 36W	100	.130	.095	30
45 36N	58 0W	180	.093	.042	1
45 36N	58 24W	275	.077	.048	23
45 36N	58 48W	120	.105	.066	26
45 48N	58 12W	165	.097	.049	1
45 48N	58 36W	270	.083	.047	22
45 0N	59 12W	130	.105	.084	237
45 0N	59 36W	105	.078	.049	236
45 12N	59 0W	90	.112	.080	45
45 12N	59 24W	85	.123	.081	231
45 12N	59 48W	95	.096	.049	235
45 24N	59 12W	80	.131	.086	229
45 24N	59 36W	110	.102	.050	233
45 36N	59 0W	150	.092	.048	33
45 36N	59 24W	150	.095	.045	230
45 36N	59 48W	130	.086	.019	237
45 48N	59 12W	165	.091	.042	39
45 48N	59 36W	105	.116	.035	228

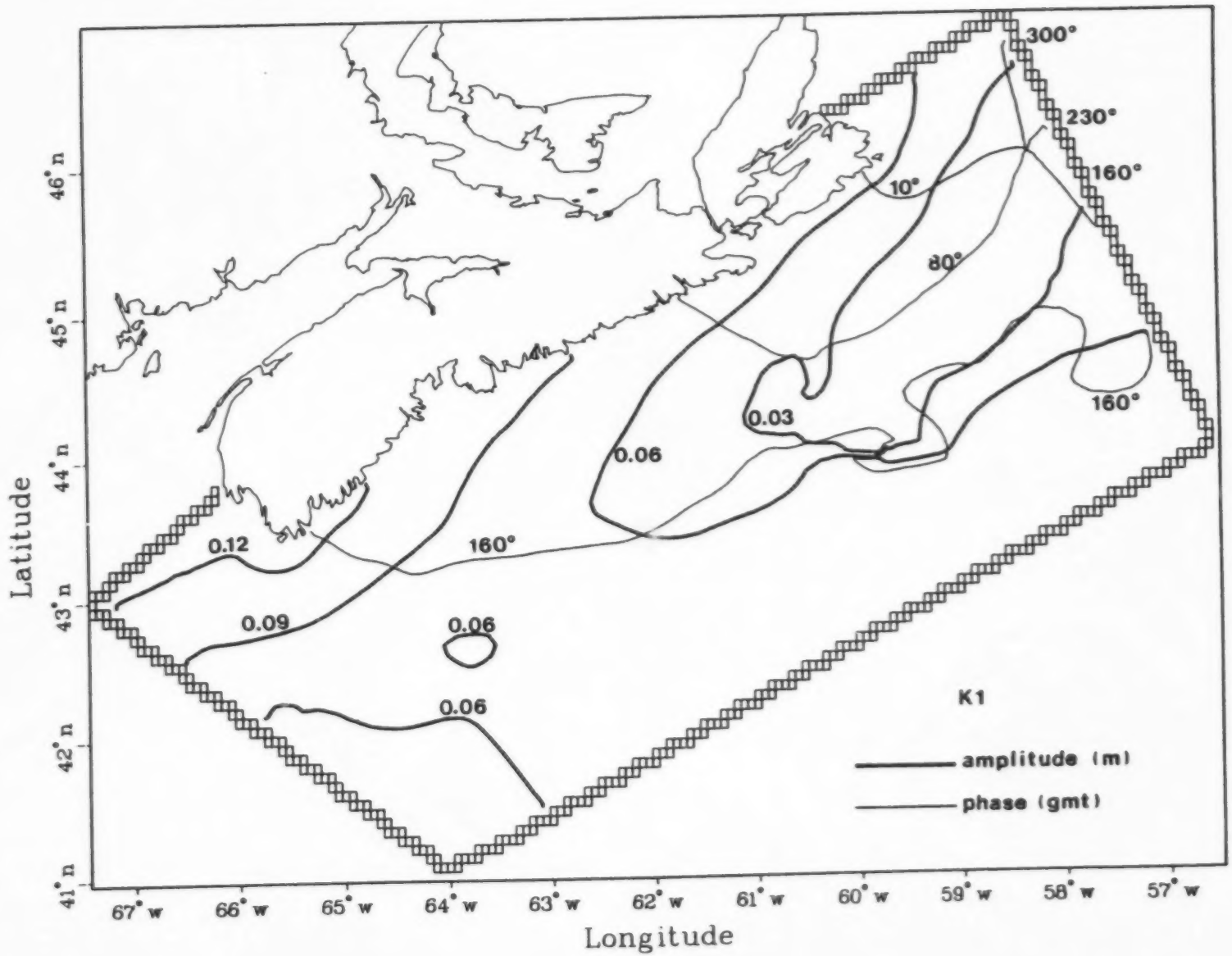
SCOTIAN SHELF TIDAL MODEL CURRENT VARIABILITY

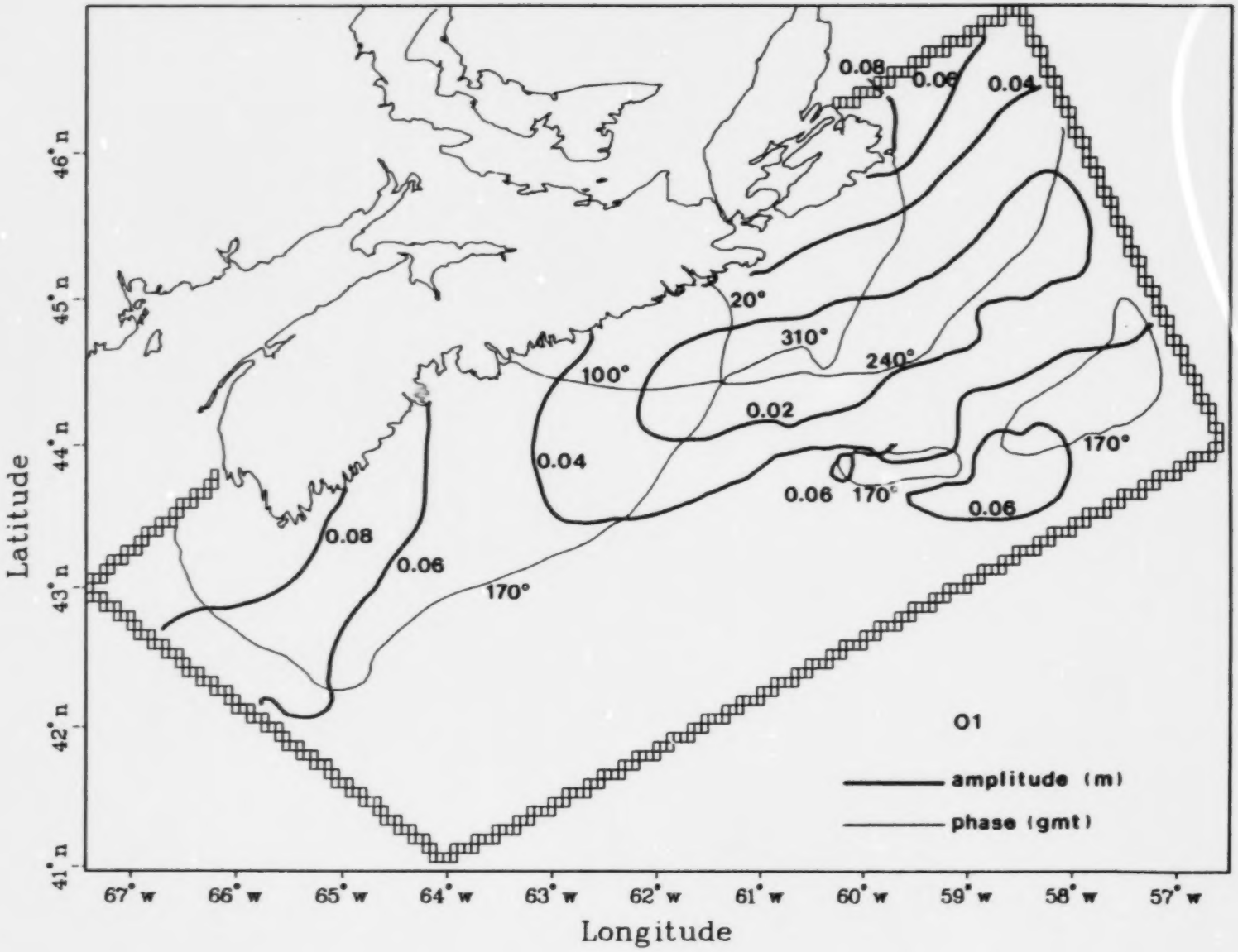
Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
-45 N 60 W-					
45 0N	60 24W	82	.074	.034	248
45 0N	60 48W	142	.062	.012	243
45 12N	60 12W	80	.089	.039	43
45 12N	60 36W	130	.081	.032	230
45 24N	60 0W	170	.071	.015	237
45 24N	60 24W	120	.062	.011	235
45 24N	60 48W	100	.060	.016	33
45 36N	60 12W	160	.074	.005	244
45 36N	60 36W	20	.049	.004	242
-45 N 61 W-					
45 0N	61 0W	190	.060	.010	245
45 0N	61 24W	86	.073	.007	249
45 0N	61 48W	37	.063	.020	229
-46 N 58 W-					
46 0N	58 0W	420	.068	.033	169
46 0N	58 24W	295	.077	.032	6
46 0N	58 48W	110	.130	.078	29
46 12N	58 24W	375	.066	.025	8
46 12N	58 48W	270	.082	.016	16
46 24N	58 36W	400	.060	.014	16
46 36N	58 24W	435	.072	.028	17
46 36N	58 48W	412	.055	.004	33
46 48N	58 48W	425	.072	.032	43
-46 N 59 W-					
46 0N	59 0W	130	.123	.066	36
46 0N	59 24W	70	.171	.075	34
46 12N	59 0W	130	.123	.052	25
46 12N	59 24W	65	.137	.048	20
46 24N	59 0W	310	.058	.013	25
46 24N	59 24W	125	.075	.027	231
46 24N	59 48W	58	.052	.026	122
46 36N	59 12W	370	.053	.016	240
46 48N	59 0W	434	.050	.026	43

Latitude	Longitude	Sounding M.	Current Variability Major	Minor	Dir
45 0N	60 36W	95	.071	.034	253
45 12N	60 0W	150	.071	.023	231
45 12N	60 24W	70	.102	.059	229
45 12N	60 48W	140	.080	.014	226
45 24N	60 12W	160	.065	.012	239
45 24N	60 36W	90	.064	.016	232
45 36N	60 0W	175	.080	.011	239
45 36N	60 24W	100	.071	.003	253
45 48N	60 0W	50	.101	.008	244
45 0N	61 12W	149	.065	.007	248
45 0N	61 36W	55	.080	.015	250
45 12N	61 0W	60	.093	.004	239
46 0N	58 12W	385	.068	.032	176
46 0N	58 36W	195	.105	.052	21
46 12N	58 12W	415	.071	.029	5
46 12N	58 36W	340	.068	.021	13
46 24N	58 24W	418	.065	.021	12
46 24N	58 48W	358	.057	.013	20
46 36N	58 36W	400	.063	.014	26
46 48N	58 36W	415	.082	.038	35
46 0N	59 12W	90	.149	.086	29
46 0N	59 36W	60	.189	.042	18
46 12N	59 12W	80	.135	.060	26
46 12N	59 36W	50	.135	.033	9
46 24N	59 12W	160	.076	.017	33
46 24N	59 36W	110	.062	.033	259
46 36N	59 0W	405	.052	.008	226
46 36N	59 24W	300	.051	.035	258

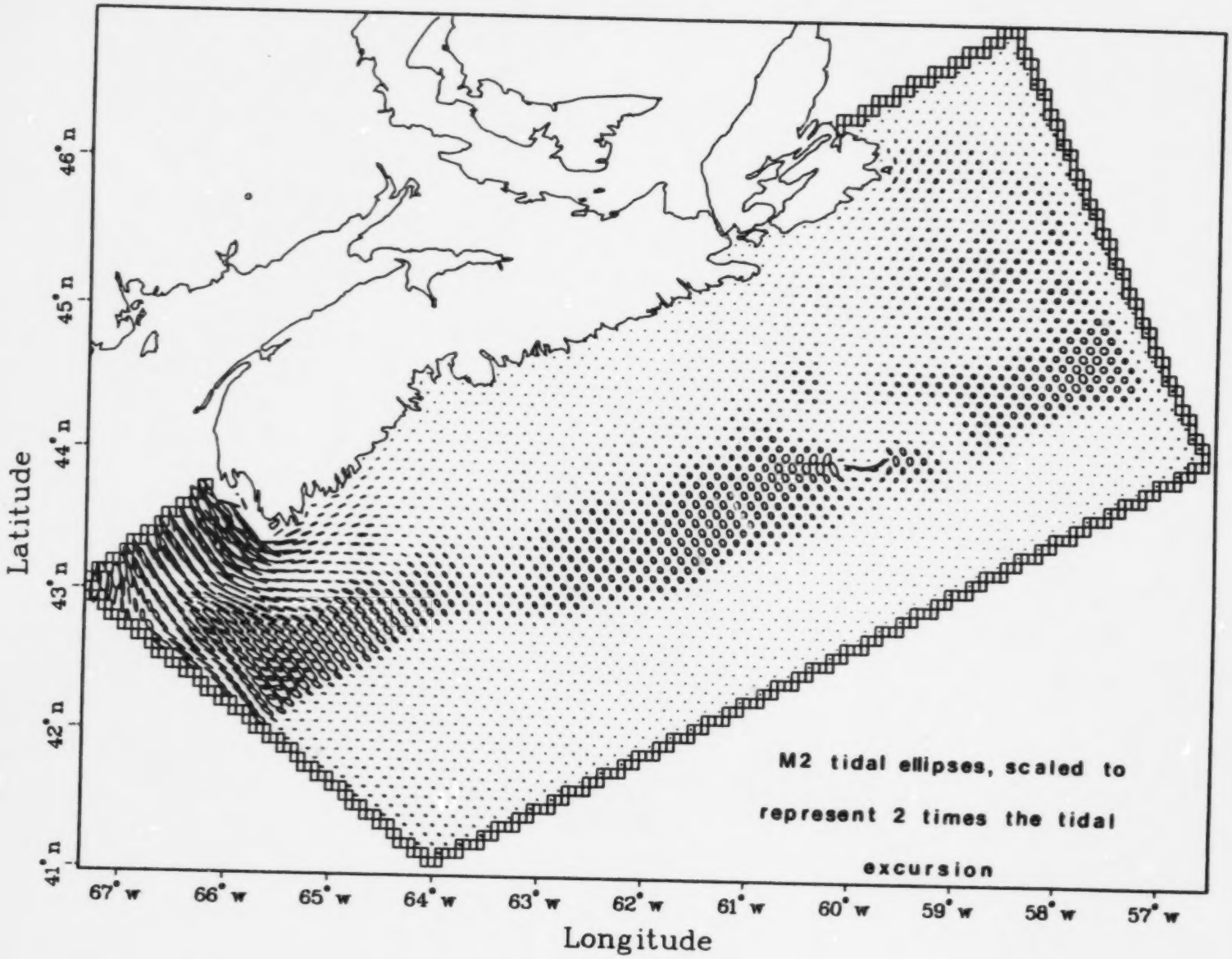
APPENDIX A
Cotidal Charts for the Scotian Shelf

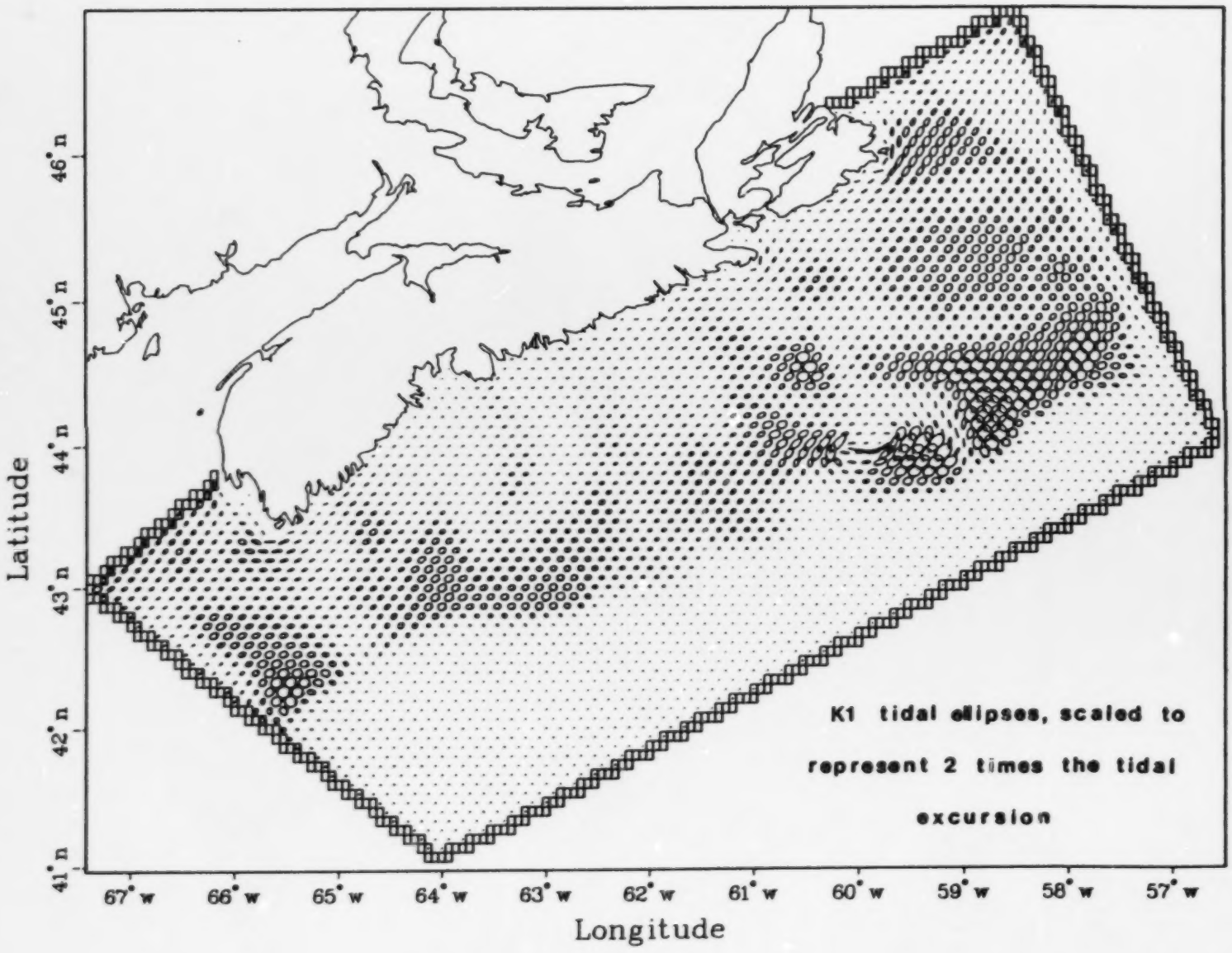

Latitude
Longitude
46° n
45° n
44° n
43° n
42° n
41° n
67° w
66° w
65° w
64° w
63° w
62° w
61° w
60° w
59° w
58° w
57° w
345°
345°
345°
0.75
1.25
1.00
0.50
10°
70°
40°
M 2
amplitude (m)
phase (gmt)

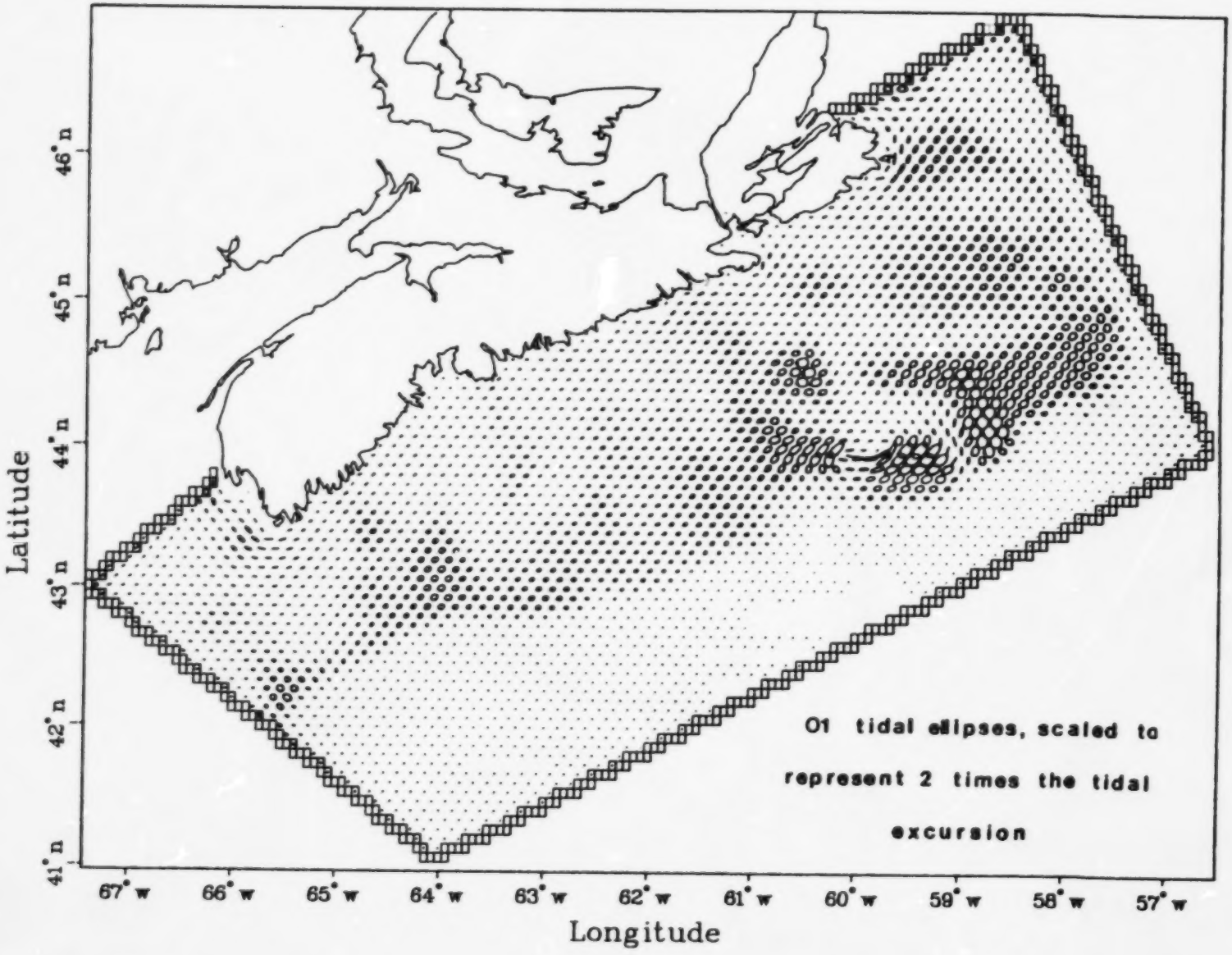

300°
230°
160°
10°
80°
160°
0.03
0.06
0.12
160°
0.09
0.06
0.06
K1
amplitude (m)
phase (gmt)
46° n
45° n
44° n
43° n
42° n
41° n
67° w
66° w
65° w
64° w
63° w
62° w
61° w
60° w
59° w
58° w
57° w
Latitude
Longitude


0.08
0.06
0.04
20°
310°
240°
100°
0.02
0.04
170°
0.06
170°
0.06
0.08
0.06
170°
O1
amplitude (m)
phase (gmt)
46°n
45°n
44°n
43°n
42°n
41°n
67°w
66°w
65°w
64°w
63°w
62°w
61°w
60°w
59°w
58°w
57°w
Latitude
Longitude

APPENDIX B
Tidal Ellipses for the Scotian Shelf


46° n
45° n
44° n
43° n
42° n
41° n
Latitude
67° w
66° w
65° w
64° w
63° w
62° w
61° w
60° w
59° w
58° w
57° w
Longitude
M2 tidal ellipses, scaled to
represent 2 times the tidal
excursion


Latitude
46°n
45°n
44°n
43°n
42°n
41°n
67°w
66°w
65°w
64°w
63°w
62°w
61°w
60°w
59°w
58°w
57°w
Longitude
K1 tidal ellipses, scaled to represent 2 times the tidal excursion


46°n
45°n
44°n
43°n
42°n
41°n
Latitude
67°w
66°w
65°w
64°w
63°w
62°w
61°w
60°w
59°w
58°w
57°w
Longitude
O1 tidal ellipses, scaled to
represent 2 times the tidal
excursion